

STAPLE INN. THE GARDEN

THE
INSTITUTE OF ACTUARIES
1848-1948

*An Account of
The Institute of Actuaries during its
First One Hundred Years*

BY
REGINALD CLAUD SIMMONDS

PREPARED BY ORDER OF THE COUNCIL
IN CONNEXION WITH THE
CENTENARY CELEBRATIONS



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DEDICATED TO
MEMBERS OF THE INSTITUTE WHO
GIVING THEMSELVES FOR THEIR COUNTRY
COULD DO NO MORE

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INTRODUCTORY

Napoleon Bonaparte is said to have informed his soldiers, with inspiring but unhappy rhetoric, that from the summit of the Pyramids, forty centuries looked down upon them. At this time, the Institute of Actuaries looks back upon twenty quinquennia and the Council has decided that some account should be offered of the Institute's history. The task and the privilege of preparation have fallen to an amateur who is conscious of the truth of Sir Max Beerbohm's suggestion that 'nepotic piety did not atone for certain drawbacks'. The author has been granted complete freedom of treatment and unrestricted access to records and has a filial relationship: it follows that drawbacks such as 'a lack of discernment, style and lucid order' (to quote from Beerbohm again) are personal and unavoidable.

Very much has happened at and to the Institute and there could be no excuse for padding the pages with extraneous matter. The book is intended to be a record of the Institute of Actuaries and the author could not roam into kindred subjects, such as the history of Actuarial Science or the history of Life Assurance. With regard to this last, it has been suggested to him, and he agrees, that stress should be laid on the large number of Life Assurance Offices operating in 1848, on their very diverse quality and on the end of early failure or absorption that awaited so many of them: Charles Dickens's 'Anglo-Bengalee Disinterested Loan and Life Insurance Company' is not entirely a caricature. Under the same inspiration, the author wishes also to emphasize here that, despite their necessarily meagre opportunity of acquiring technical equipment, the leading professional actuaries connected with the strong and reputable Offices of those early days were men of wide culture, breadth of mind and general soundness of view. The story of individual actuaries as such does not fall within the scope of the work, but many incidental and essential references are made.

The record had to be selective, but the author has tried to compile it without bias. To some, it may seem that the period of effective

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selection expired before much, or any, of the book was written. The only defence offered is that the work is an attempt to portray and to enforce the fact of the Institute's abundant life—and life often becomes significant in little things. A definite effort has been made to eliminate the merely trivial: the history, like the work, of the Institute is concerned with much more than the patient reckoning of the data of the dead.

The plan chosen is to survey, in successive epochs, the general stream of Institute life: matters such as Educational Work, the *Journal*, the Library, Mortality Investigations, Social Life and Statistics are treated—apart from occasional allusions—separately with regard to the period as a whole. Similar events have occurred many times, but it has not been thought advisable to attempt to secure completeness by saying the same thing mechanically in the account of each epoch; subject to piquancy of detail, the reference is made usually on the first occasion. The scale may appear in some sense to be logarithmic rather than uniform: there are at least two reasons for such a feature. One is the specially compelling interest of the earlier times and another, the fact that freedom of quotation increases directly at least in the ratio of the interval since the actual occurrence. The main source of the record is the Minutes of the Council of the Institute, which have been preserved from the beginning: such frequent phrases as 'It was resolved' relate, unless it be stated otherwise, or the context so require, to decisions of the Council. The *Journal* of the Institute is also a rich mine and other books and papers have been laid under contribution. The early records are by no means as full as a chronicler would desire. Faint echoes, elusive traces of aroma, suggestive fragments—an old painting on a Church wall, covered with whitewash through neglectful years and yet preserved in outline and general pattern, though many details are gone for ever—these typify the sources from which the account of the beginning of the Institute has had to be formed. It is of no avail to hope for sudden or complete illumination.

To avoid the needless breaking of a thread already short in the staple, precise references have been kept to a minimum in the text

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and there are very few footnotes: a short collection of 'References' is placed immediately before the Index.

A recent article in *The Times Literary Supplement* posed the questions whether 'it is futile to attempt to achieve scientific accuracy in recording what happened in the past' and 'whether to attempt it is not also foolish'. The argument continued: 'Is history indeed the record of what has happened? Is it not quite clearly and demonstrably the record of what has mattered and of what, for that reason and for no other, matters still to ourselves?' This book has been written in the belief that there is much in the Institute that has mattered and still matters both to members and to interested colleagues and friends: it is hoped that none will experience the ill-effect attributed by De Morgan in his inimitable *Budget of Paradoxes* to the action of the discoverer of antimony—'finding that the pigs of his convent throve upon it, he gave it to his brethren, who died of it' (*J.I.A.* xi, 188). The case for a history of the first hundred years of the Institute, whether or not this book provides it, is that there is a proper 'pomp of yesterday' that is not yet 'one with Nineveh and Tyre'.

Statistical purists may object that a book written in the year 1947 cannot claim to be a record of 100 years ending in 1948. The author is content to reply, 'Say 99', thus exemplifying facility of approximation, though not in degree so gross as that of the publication in mid-afternoon of the night edition of a newspaper. He takes uninvited refuge among the medical profession, with which actuaries have such frequent and happy contact, and which surely does not deserve the slur cast upon it by De Morgan in translating the motto of the Royal College of Physicians, 'Ars longa, vita brevis', as 'Practice is long, so life is short' (*J.I.A.* xi, 150).

It is a happy coincidence that the President of the Institute in the Centennial Year should come officially from St James's Square, with which the Institute had domestic association long ago.

The author offers to all the friends who have encouraged him so much and so readily a cordial, if only anonymous, expression of thanks. In no spirit of undue discrimination, reference is made to the

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invaluable help given by Mr A. H. Rowell, President of the Institute—by Mr G. J. Lidstone—by Mr A. W. Evans, Chairman and Mr G. H. Recknell, Treasurer of the Actuaries' Club—by Mr E. Waugh, Secretary of the Faculty of Actuaries and Mr A. D. Dale, Assistant Secretary of the Institute. The work of the Cambridge University Press speaks for itself, but fails to convey any sufficient indication of the degree in which the author has been assisted by expert advice and friendly criticism. A final and an utterly inadequate word of appreciation is offered to Miss M. R. Swift, whose always devoted and almost incredible efforts with notes and manuscript have made possible the completion of the task.

R. C. S.

COURT LODGE
FAWKHAM, KENT

PART I

CHAPTER I

THE BEGINNING

Pre-History—The Meeting of 15 April 1848—The Meeting of 10 June 1848—The Meeting of 8 July 1848—The adopted Scheme

THE INSTITUTE OF ACTUARIES was founded on 8 July 1848 in circumstances that have been mentioned,* often incidentally and incompletely, by various writers. Thus, there are tantalizing contradictions and gaps, some of which may never be resolved or filled; but that is the common complaint of writers and readers who wish to know, of a past age, the details that seemed so natural and so little worthy of record to those who lived among them. Probably, no one concerned with the stirring professional events of 1848 spared a thought for those who would celebrate the Centenary of the Institute's foundation. Its supporters were too busy with their urgent plans and the opponents would have been loth to admit the possibility of such long, and by them undesired, survival.

It is believed that, by the collation of material in the Libraries of the Institute and the Faculty of Actuaries and in the records of the Actuaries' Club, a reasonable and consistent account can be presented of what occurred when proposals to form an association were put forward, discussed and brought to fruition in the establishment of the Institute. But, first, to place the matter in fair perspective, it is desirable to refer briefly to still earlier days. There were occasional and informal meetings of a few actuaries for several years before 1848 and it is likely also that a desire for association was felt and expressed from time to time among the general body of practitioners. John Finlaison, first President of the Institute, said on the day of his election (14 October 1848) that, twenty years before, he 'saw the great necessity of such an institution'. He was a man of authority and vision, but surely he was not alone. The decisive result reached in 1848 may appear in one aspect to have been a sudden precipitate

* See, for example, T. E. Young (*JIA*, xxviii, 436).

from a clear solution to which a pinch of activating material was added, but the solution itself was saturated.

There can be no doubt of the need of professional association, when the number of Life Assurance and kindred organizations existing in the first half of the nineteenth century and their wide range of quality are remembered. The call from these many institutions for actuarial guidance must have made very difficult the finding of a sufficient number of men with understanding of the problems involved or power to acquire it by laborious experience. Also, there was a largely latent need for professional advice to great numbers of societies, many of which were ignorant of their peril, though some, doubtless, preferred not to reveal it.

The informal gatherings of the select few had led already to some combined professional effort. For example, in June 1837 a petition was signed by some forty 'gentlemen connected with Life Assurance Offices' praying Parliament 'to order the publication of all tables founded upon the same data as those upon which the Government now grant Annuities on Lives. These tables will comprehend Annuities on Single Lives for males and females separately and on every combination of two or more joint lives, at every rate of interest at which they have been respectively computed'. Jenkin Jones, in *A New Rate of Mortality amongst Assured Lives*, says that this petition was 'never presented, probably in the expectation that the agitation of the matter would be sufficient to induce' publication. C. D. Higham in his *Early History* remarks that John Finlaison, the Government Actuary, described the signatories as 'the Forty Thieves'. The petition itself is reproduced in Jenkin Jones's book. Again, in 1838, a Committee had been appointed to collect and arrange the mortality records of certain Assurance Offices, with the result that, in 1843, the *Seventeen Offices' Experience* was published. The Committee appears to have remained in being and, according to Higham, was the nucleus of the meeting of 15 April 1848 at which the proposals were first generally discussed that led to the formation of the Institute. Higham states that his writing is 'almost a transcript of a memorandum written in 1865 at the wish of the Actuaries' Club by J. J. Downes of the "Economic"'. No copy of this memorandum remained in the archives of the Club, or could be traced elsewhere in Great Britain, but happily the Chairman of the Club knew that

Seventeen Offices' Experience: *Jenkin Jones*

Higham had bequeathed certain papers to the Actuarial Society of America. On being approached by the Chairman, the Society, with characteristic kindness and promptitude, supplied photostatic prints of Higham's own annotated copy: thus, an unfortunate gap was filled. Existing records of the earliest days, while not denying in any very important particular what Higham thus wrote, do not convey by any means so definite an impression of the Committee's leading role, but it is clear that there must have been a focus, even though that word be given, in this context, the meaning 'centre of activity, or area of greatest energy, of a storm'. And that focus, not unnaturally, would be the group of leading men who, already, had performed a notable piece of professional work. The *Seventeen Offices' Experience* was published by subscription of fifty-eight Offices, of which fifteen contributed data—two giving only their Irish experience. The remaining two Offices, of the seventeen, supplied information and were presented with copies of the Report and Tables, but did not pay anything towards the cost. No monetary tables were issued by the Committee, but Jenkin Jones, whose Office ('National Mercantile') appears in the list of subscribers though it was not one of the seventeen, produced tables in 1843 in his book to which reference has been made already. Higham says that 'Jenkin Jones somehow acquired proof sheets of the mortality rates and by a staff working at high pressure brought out his "New Rate of Mortality" thus supplanting the Committee. Naturally the Committee was aggrieved and the resentment smouldered on during the ensuing years until it broke into flame over the question of the aggressor being connected with the Institute'. This may have been so; it is true that Jenkin Jones was prominent in the formation of the Institute and one of its first Hon. Secretaries, but against this picture must be placed the facts that the Committee's publication contains no suggestion of monetary tables to follow and that Jones himself acknowledges his debt to J. J. Cleghorn ('Guardian') for some tables previously computed by him for the use of his own Office. These, on being compared with Jones's own results, were found to agree with them in every respect. Moreover—and it shows the temper of the time—Higham refers to Charles Ansell ('Atlas') and his compounding for his personal use a valuation table 'which he kept under lock and key and very few were allowed to see it'. Again, an

actuary, who in his early days knew Higham himself, has informed the author that Higham used to mark his own tables: 'These figures are the private property of C. D. Higham and must not be used or copied without his permission.'

This ante-Institute history shows the gradual establishment of a mainly informal association on the part of a number of the more influential actuaries and suggests that, among the rest, there was a vague stirring towards co-operation. Scottish example and influence were also important. An Association of Managers of Scottish Offices had been formed in Edinburgh about 1834 (the precise year is uncertain) and in November 1844 the London Manager of the 'English and Scottish Law' was present at a Special Meeting of the Association with which he discussed his idea of trying to establish a similar body in London.

In April 1845, W. T. Thomson of the 'Standard' and G. L. Finlay, the Secretary of the Association, formed a deputation to London to discuss a Parliamentary Bill for regulating Life Assurance Offices. A year later, a Committee was formed in Edinburgh 'to bring about some arrangement for a systematic application of the combined experience of English and Scotch Offices and to promote upon sound principles the great objects of that scientific occupation in which they were all engaged'. In October 1846, although, apparently, the Committee had not been able to make any progress, it was decided 'merely to postpone the matter and not to lose sight of it'. But in due course the Scottish efforts began to bear fruit.

When, in 1848, the first general consideration was given to the question in London, it became clear that there was a definite division of view upon the nature of any such combination. One section, small, compact and powerful, desired at most only an Association of Managers of Life Assurance Offices—the remainder, larger, looser and individually less weighty, wished to establish a Professional Body of Actuaries as such. Neither party appears to have wanted both these institutions, though it may have been in the minds of some supporters of the 'Institute plan' that, later, the Institute would deal with business practice. Such a cleavage of opinion was present before the preliminary meeting on 15 April 1848, and became evident and irreparable as soon as, and probably before, the larger gathering proceeded to business on 10 June 1848.

First-class Offices

It will be seen, from the story below of the formation of the Actuaries' Club, that one of the fundamental considerations of its founders was that they represented what, even in the Life Assurance world of to-day, men still call 'first-class Offices'. How much more, 100 years ago, was it justifiable and is even yet comprehensible that some of the actuaries of first-class Offices should be particular ! Stray evidence of this fact is shown in Deuchar's book *Early Actuarial and Managerial Associations*. After mentioning that seven out of ten of the Committee appointed at the meeting of 15 April 1848 desired quietly to shelve the proposal to form an Association, he goes on thus :

Their motives may be conjectured from what afterwards occurred. The seven were, for the most part, connected with intensely respectable Offices and they probably regarded themselves (doubtless with good reason) as belonging to the *crème de la crème* of actuaries. They might have had no objections to associate themselves with six, or even ten, other righteous men of the profession, if, peradventure, ten could have been found. But they saw no good in associating with Dick, Tom and Harry, and they probably regarded with some suspicion and jealousy all the modern companies and modern actuaries. They also were, perhaps, somewhat averse to follow a Scotch initiative in a matter of the kind; but, nevertheless, if somewhat narrow they were very excellent men in their way. The minority of three consisted of equally good men, but of a broader-minded type.

It is only fair to point out that the seven did find six others to join them at the inception of the Actuaries' Club and that one of its chief purposes was to discuss matters of Office practice. Thus, there was a much closer following of the Scottish initiative by the Club than by the Institute.

The Institute has had not only an *ante-natal*, but also an *anti-natal* history. Unless this salient fact be given proper weight, it is not possible to obtain a true and clear picture of the actual beginning of the Institute, or indeed of its career up to the grant of the Royal Charter in 1884.

THE MEETING OF 15 APRIL 1848

The record of the Institute of Actuaries begins (like others in England) at least partly with a Scotsman and, similarly, develops to the formation of a body quite different from that originally contemplated. On Saturday, 15 April 1848, there was held at the Standard Life Assurance Office, in King William Street, London, a meeting of actuaries and others connected with the management of Life Assurance Institutions in London. Griffith Davies of the 'Guardian' was in the Chair and informed his twenty-seven associates of a personal communication, made to himself and others by W. T. Thomson, the Manager of the Standard Life Assurance Company in Edinburgh, that an Association of the Managers of Life Offices in Edinburgh had been formed about 15 years since and had been attended with many beneficial results. It was thought advisable, therefore, to have a preliminary meeting in London with the view of ascertaining the sentiments of the actuaries, etc. of the London Offices about the formation of a similar association.

W. T. Thomson was present and gave to the meeting an explanation of the regulations that governed the Association in Edinburgh and the advantages that had resulted from it; whereupon the following Resolutions were passed:

That it appears desirable that those connected with the management of Life Assurance Institutions should have occasional opportunity of meeting together and consulting on subjects of mutual interest.

And

That a Committee of not exceeding Ten be formed to consider the best mode of carrying out the same and to report thereon to a future meeting.

These details and others following are recorded in a manuscript notebook preserved (in its original marbled-paper cover) in the Library of the Institute of Actuaries. It is stated that, after these Resolutions had been passed, the Chairman was obliged, in consequence of a particular engagement, to leave the meeting, but before doing so he expressed his entire approbation of its objects and offered the use of the Board Room of the Guardian Assurance Office for future meetings.

The Committee of Ten

T. Galloway of the 'Amicable' Office was elected Chairman and the following Committee was nominated and appointed, after an amendment proposing that the members be chosen by ballot had been negatived:

GRIFFITH DAVIES	'Guardian'
J. J. DOWNES	'Economic'
C. ANSELL	'Atlas'
J. M. RAINBOW	'Crown'
W. S. B. WOOLHOUSE	'National Loan Fund'
T. GALLOWAY	'Amicable'
P. HARDY	'Mutual'
J. GODDARD	'Rock'
R. TUCKER	'Pelican'
S. INGALL	'Imperial'

Two of the chosen ten, Rainbow and Woolhouse, were elected in their absence. R. Tucker was appointed Secretary to the Committee and the meeting expressed cordial thanks to W. T. Thomson for his efforts.

No actual record of the deliberations of the Committee has been found, but Higham refers to several meetings at the 'Guardian' Office in the course of which 'Hardy, having made certain suggestions relative to the formation of a College of Actuaries, but without putting them into practical form, was requested to embody them in writing, and submit the paper to the Committee at their next meeting; this he engaged to do. The Committee accordingly assembled fully expecting to receive and consider the statement, but Hardy absented himself and sent a message intimating that he purposely remained out of town. No business therefore was transacted, but the Committee dined together at the London Coffee House.'

Peter Hardy ('Mutual') is shown, therefore, as having suggested to the Committee the establishment of a College of Actuaries, whereas the general mind of the Committee, revealed soon afterwards in its Report, ignored such an Institution and did not look beyond an Association of Managers like that already existing in Edinburgh. It is strange to actuaries of the present time, who are accustomed to the friendly working of two independent bodies (the Institute of Actuaries and the Life Offices' Association), that the very able and acute men of 1848 do not seem to have considered such a solution of a difficulty that was both obvious and menacing almost

from the outset of the meetings, if not before they even began. The two conceptions were needlessly opposed and, according to Higham, it was hoped that the Institute when fully established would include 'the consideration of business matters among its objects'. Apparently, the small body of influential actuaries was set upon having only an Association of Managers and was content to leave training to take the form of apprenticeship to existing practitioners; the remainder was determined to form an Institute with professional standards and an organized system of teaching and examination, with an underlying, vague and secondary prospect of embracing the discussion and co-ordination of Life Assurance practice. Almost, one is tempted to believe in 'Progress'.

THE MEETING OF 10 JUNE 1848

This meeting was called for Saturday, 10 June 1848, at the 'Guardian' Office, by a circular (a copy is in the Library of the Faculty of Actuaries) of 20 May 1848 issued from 70, Lombard Street. With probably unconscious prescience, the first business was stated to be to receive the Report of the Committee. The circular specified the five points of Life Assurance practice mentioned in the Report (which is reproduced below) and expressed the view of the Committee that the meeting should give its opinion on those points. It was hoped, therefore, that persons invited to attend would consider them and try to ascertain, before the meeting, the attitude of the Directors of their various Offices. The suggestion that the five points should be brought to immediate decision is particularly significant.

Sixty-six actuaries and others attended the meeting.

Although Griffith Davies was Chairman of the Committee and so signed its Report, he was not present but sent a letter stating the cause of his absence and authorizing the attendance, in his stead, of J. J. Cleghorn, Assistant Actuary of the 'Guardian'. The account of the meeting is silent upon the reason for Davies's being away but, according to Higham, Davies had left London on the previous day 'for his usual tour', despite an expectation that he would be in the Chair.

T. Galloway was called to preside and his signature is appended to the Minutes, then read and confirmed, of the meeting of 15 April 1848.

Report of the Committee of Ten

The Report of the Committee of ten was submitted thus:

The Report of the Committee appointed at a General Meeting held at the Standard Life Assurance Office, King William Street, on Saturday the 15 April last to consider the best mode of carrying out the design of a previous Resolution to the effect 'that it appeared desirable that those connected with the management of Life Assurance Institutions should have occasional opportunity of meeting together and consulting on subjects of mutual interest'. Your Committee, deeply impressed with the importance of the subject submitted for their consideration, have carefully discussed the several advantages which in their opinion were likely to result from the formation of an Association of the Managers of Life Assurance Offices.

The subject has appeared to your Committee one of much interest but of considerable difficulty, and the conclusion they have arrived at after mature deliberation, and which they now beg to report, is that it is not expedient at the present time to lay down rules for the formation of a Society of any description, but still acting on the spirit of the Resolution passed on the 15th ultimo, they are of opinion that occasional meetings of the kind referred to may be held with advantage, if they should from experience be found to establish uniformity in dealing with certain points which are of constant occurrence in Assurance Offices but in respect of which there is much diversity of practice.

Those which appear to your Committee to be deserving of immediate consideration are the following, vizt.:

'To determine the propriety or otherwise of paying fees to the medical referees of parties whose lives are proposed for assurance.'

'To agree as to the proper parties to whom commission should be paid. (Some Offices recognizing only the person who introduced the Insurance—other, the individual entrusted to pay the premiums.)'

'To define what is really meant by "Actual Military or Naval Service".'

'To settle the extra premiums for sea risk and foreign residence.'

'And whether Assignments of Policies should be recognized and Canterbury Probates required in the payment of claims.'

There are other subjects, some perhaps of minor importance to the foregoing, which in the opinion of your Committee it would be desirable to settle, but they refrain from making further suggestions believing that sufficient matter has been recommended for discussion at present.

For the Committee

GRIFFITH DAVIES

Chairman

GUARDIAN ASSURANCE OFFICE

19 MAY 1848

According to the record 'a long and desultory conversation then took place touching the nature of the reference to the Committee and the several matters mentioned in the Report', which was received but not adopted. It is amusing now to record that E. Ryley, in the pamphlet mentioned below, quotes these minutes (from memory) as referring to the conversation as long and 'disorderly'.

The Report spoke for itself and so speaks still. The first Resolution of 15 April 1848 referred to the occasional meeting together of persons connected with the management of Life Assurance Institutions; the Committee appointed to consider it intensified the emphasis and limited the application by writing at the outset of 'the formation of an Association of the Managers of Life Assurance Offices'. Having thus cast the underlying idea into this definite mould, the Committee decided against any Society 'of any description' but, 'acting on the spirit of the Resolution', proposed the immediate consideration of five practical matters of Life Assurance administration. At least three of them give rise to doubt and inquiry even yet.

The quotation made above from the record of the discussion at the meeting suggests, in its words 'touching the nature of the reference to the Committee', not only that there was fundamental dissatisfaction with the Report but also that the assembly doubted whether the first Resolution of 15 April 1848 had expressed properly what was wanted. It may be that some spoke against the further narrowing introduced by the Committee, but as there was nothing to receive except the Report, it was received and the way was cleared for further action.

To resume quotation from the record (with the addition, for interest's sake, of the Offices to which the members of the new Committee were attached):

It was moved by Mr Hardy, seconded by Mr Ratray, and **RESOLVED** That this meeting consider it desirable to establish a scientific and practical Association amongst the Actuaries, Secretaries and Managers of the Life Assurance Societies of Great Britain.

The Committee having acquiesced in the suggestion that their functions had terminated by the Report made this day, Mr Jenkin Jones suggested that a new Committee should be appointed to consist of the old Committee and certain others to be now named, but upon some of the members

The Committee of Fifteen

of the Old Committee having expressed a desire to be excused from acting further,

It was moved by Mr Jenkin Jones, Seconded by Mr Pinckard, and RESOLVED That a Committee consisting of fifteen Members be elected by ballot to devise the best means of carrying the Resolution now passed into effect and to Report to a future meeting.

The Meeting then proceeded to ballot for the Committee—Mr Robinson of the 'Minerva' and Mr Wardrop of the 'Experience' having been appointed Scrutineers.

At the conclusion of the ballot the Scrutineers reported the number of votes and the following fifteen Gentlemen were declared to be elected Members of the Committee, vizt.:

Mr DAVIES	'Guardian'
GALLOWAY	'Amicable'
HARDY	'Mutual'
HILLMAN	'Star'
JELlicOE	'Eagle and Protector'
DAVID JONES	'Universal'
JENKIN JONES	'National Mercantile'
LE CAPPELAIN	'Albion'
NEISON	'Medical'
RAINBOW	'Crown'
RATRAY	'Victoria'
ROBINSON	'Minerva'
SYLVESTER	'Equity and Law'
TUCKER	'Pelican'
WOOLHOUSE	'National Loan Fund'

RESOLVED unanimously, That Mr Cleghorn of the 'Guardian' be requested to act as Secretary to the Committee.

RESOLVED unanimously, That the thanks of this Meeting are hereby given to Mr Galloway for his services in the Chair this day.

A curious feature of the record is that the Minutes of this meeting, though read and confirmed at the third meeting on 8 July 1848, when Peter Hardy was in the Chair, bear the actual signature of T. Galloway.

One account of the meeting says that the major Resolution was carried 'by a large majority'.

Of the Committee of ten, Ansell, Downes, Goddard and S. Ingall, though all present at the meeting when the new Committee was appointed, were not members of it and must be presumed to be those

who 'expressed a desire to be excused from acting further'. A copy of the record (in the Library of the Faculty of Actuaries) has 'Yes' written against the names of the six members of the Committee of ten who joined the larger Committee appointed at the meeting of 10 June 1848. There is nothing to show when, by whom, or for what purpose this indication of assent was added, but it is an interesting reference to the line of cleavage. Galloway, according to Ryley's pamphlet, begged earnestly to be excused but was over-pressed to serve. Yet, he became Chairman of the Committee of fifteen and was appointed later to the Enrolment Committee. His hesitation was resolved soon afterwards, when he announced that he did not intend to offer himself for enrolment and withdrew from the Enrolment Committee.

Higham says that after leaving the meeting 'Downes, Rainbow and two or three others adjourned to the "Crown" and in conversation there it was deemed highly desirable to continue the old Committee [i.e. the Seventeen Offices' Committee] for the purpose of conference and so on and to discuss the matter further at a dinner to be held at the York Hotel in New Bridge Street'. Seeing that Rainbow presided at the first meeting of the new Committee and later accepted appointment to the Enrolment Committee, of which on one occasion he acted as Chairman, Higham's reference cannot be read as meaning that all those who went to the 'Crown' had decided finally against membership of the Institute. But that must have been their general attitude, for the records suggest that these were all absent from the third meeting of 8 July 1848. Rainbow (owing to domestic affliction) was not there, but he sent an apology. Perhaps the adjournment to the 'Crown', whether or not the reference be to Rainbow's Office, indicates that, foreseeing the probable split, he was trying to prevent it. This view is confirmed by the fact that, though he was an original member of the Actuaries' Club, he joined the Institute and did not resign his Fellowship until late in 1849. Despite his professional prominence, he was not a member of Council.

As regards Griffith Davies, Higham states that, after the second meeting, on 10 June 1848, Cleghorn and perhaps another actuary wrote to him in Wales, informing him of the 'great meeting' that had been held and that he had been almost unanimously elected, and was

The Mystery of Griffith Davies

consequently looked upon by a large body as the future President, but not one word was said as to the refusal of the old Committee to take any part in the proceedings. Davies, on the faith of this letter, believing that his old colleagues were consenting parties to the arrangement, represented, wrote in reply an expression of his cordial adhesion to the new Society; but when at the expiration of his term of absence he found to his dismay that he had become dissociated from his oldest and most valued friends he was greatly annoyed. He then used his utmost endeavours to conciliate his old associates, and to bring them into unison with the new body, but all his efforts to accomplish this failed, and he was reluctantly compelled to renounce the 'great honour' in prospect for him—at the expense of a final separation from those he most respected: at the same time having given his adhesion to the intended Institute, he felt he could not in honour take any part in the proceedings of the other party, and so between the two stools he fell to the ground.

This explanation conveys a plain suggestion that Davies, deceived by his Assistant and by a friend, was placed in a false position from which he could not retreat and had to lose not only the friendship of old associates but also the Presidency of the Institute. One feels, nevertheless, that much remains dark; for example, the extraordinary incident of the absence from the meeting itself is not covered, nor is the utter failure by a much respected man 'to conciliate his old associates' even to the extent of remaining in some friendly relation with them. Full light may not be obtainable, but some weight should be given to the positive statements about Davies's indifferent health that were made at the meeting on 14 October 1848 of members of the Institute. These statements are noticed in some detail below. Confirmation of his state of health appears in the following extract from the Memoir by his nephew, Thomas Barlow (*J.I.A.* v, 337):

In the winter of 1847 Mr Davies was afflicted with a severe influenza, which fixed on his lungs a chronic bronchitis, from which he suffered during the remainder of his days.

Davies was born on 28 December 1788 and, thus, was nearly 60 years old at the material time. He died on 21 March 1855.

The new Committee set to work promptly and at its first meeting on 17 June 1848 (twelve members being present—and Griffith Davies,

David Jones and Woolhouse absent) appointed a Sub-Committee of five 'to prepare a draft scheme with rules and regulations and the reasons for the necessity and adoption of the same'. Rainbow, Hardy, Sylvester, Jellicoe and Neison were nominated to be the Sub-Committee, but 'on Mr Rainbow stating his inability to attend the Committee for the next two or three months', Jenkin Jones was elected instead. The Sub-Committee held four meetings and on 27 June 1848 produced its Report to the full Committee, of which ten members were present including David Jones. The Report consisted almost entirely of a draft scheme for establishing an Institute of Actuaries and after being 'read and considered clause by clause, some alterations were made therein and it was finally agreed to'. The document was headed 'Proposed Plan for the establishment of an INSTITUTE OF ACTUARIES, to be submitted to a General Meeting on the 8th day of July 1848'. It contained 35 clauses and was ordered to 'be printed and circulated throughout the profession and submitted for approval' at the General Meeting.

The Committee then adjourned until 5 July 1848.

There are an actual print of the Scheme and, in a leather-bound book, a manuscript copy in the Library of the Institute. The two versions show only minor differences.

THE MEETING OF 8 JULY 1848

Peter Hardy was in the Chair and there were present rather more than fifty others (the records do not quite agree), as well as a deputation of nine from Scotland. Griffith Davies, Rainbow and Neison sent letters explaining their unavoidable absence. Woolhouse was not present, nor was Galloway—the second man in this story to sign a Report as Chairman and to be away when, later, it was discussed.

The following Report from the Committee of fifteen was submitted:

Your Committee in accordance with the Resolutions passed at the said Meeting—vizt.:

'That this Meeting consider it desirable to establish a scientific and practical association amongst the Actuaries, Secretaries and Managers of the Life Assurance Societies of Great Britain—and that the Committee

Report of the Committee of Fifteen

then appointed should devise the best means of carrying such Resolution into effect.'

Report That at their first meeting held on the 17th ultimo, after a long discussion in the course of which the views of each Member of the Committee were obtained, it was unanimously determined that the preparation of a Draft Scheme should be referred to a sub-Committee consisting of five Members and such sub-Committee was accordingly then appointed.

Your Committee received the Report of the sub-Committee on the 27th June last and unanimously agreed to the plan hereunto appended of which a printed copy has been forwarded to every Actuary and Secretary whose name appears in the *Post Magazine Almanack* for 1848.

Your Committee considering that the proposed Plan is calculated to affect the individual interests of the whole of the profession invite a full and free discussion of its details and should a scheme founded thereon be agreed to by a majority of the present meeting they will be ready to co-operate in carrying the same into effect.

Your Committee would suggest that in the event of some such plan as the one proposed being adopted a Provisional Committee of not less than 15 be forthwith appointed for the enrolment of Members and that on the expiration of the time prescribed for such enrolment a General Meeting of the Members be convened to elect a President and Council.

8th July 1848

THOS. GALLOWAY, *Chairman of the Committee*
GRIFFITH DAVIES *per* J. J. CLEGHORN
PETER HARDY
DAVID JONES
W. T. ROBINSON
JENKIN JONES
CHAS. JELlicOE
W. RATRAY
J. LE CAPPELAIN
ROBERT TUCKER
W. HILLMAN
J. J. SYLVESTER

Cleghorn's signing on behalf of Griffith Davies is evidence, presumably, that the Chief was still on holiday and that he had conferred upon his Assistant a full actuarial Power of Attorney.

It appears from the *Post Magazine's* account of the meeting that the

Report of the Committee was signed by only twelve of its fifteen members because Neison had been called into the country, Rainbow was kept away by domestic trouble and Woolhouse was 'unavoidably absent'. The same account refers also to the reading of letters from eminent members of the profession, but neither the names nor the opinions are indicated.

On the motion that the Report of the Committee be received, E. Ryley ('Australasian'), speaking, as he said, for himself and not about persons, moved that the matter be referred to a Committee who should confer with certain actuaries of 15 years' standing and some eminent, named, mathematicians, to obtain their opinions on the question of forming an Institute or College of Actuaries for the study of the theory of Life Contingencies, etc. He pointed out that open separation had occurred between the promoters of the present plan and some of the Committee of ten whose opposition could not be disregarded, in view of their long-standing and acknowledged ability. After referring to the imputation of unworthy motives as being one cause of dissension, he said that, unless his proposition or something equivalent to it were adopted, the scheme before the meeting would be an utter failure. Jenkin Jones brought up the question of an anonymous circular recently received by a few persons and it was suggested that Ryley was the author. He denied this and left the meeting (because of a painful, but unspecified, disease) and published on 17 July 1848, through Smith Elder and Co., a 28-page pamphlet entitled *A Statement of Facts connected with an Anonymous Circular and the Proceedings at certain meetings lately held of Actuaries and others officially connected with Life Assurance Companies*. The anonymous circular advocated the formation of 'a College of Actuaries for granting certificates of qualification (after examination) to Actuaries': it contained a few general suggestions, followed by an interesting 'Query': 'Would London University examine and grant certificates to Actuaries?' There is a suggestion that Fellows should use the letters 'F.C.A.' and Associates, 'A.C.A.', but the supremely quotable portion is surely this:

The establishment of a College of Actuaries would in time prevent Attorneys and ignorant Accountants or Auctioneers presuming (as they now do) to advise parties on the value of contingent or reversionary property or money payments.

The Institute formed

After this long interval it is difficult to see why, apart from the question of anonymity, such proposals should have aroused so violent, if so localized, a storm unless it was that many existing practitioners feared that the scheme for a College would debar them from recognition as actuaries and leave them in the outer darkness to the company of 'Attorneys and ignorant Accountants or Auctioneers'. Much of Ryley's pamphlet is filled with a wearisome description *in extenso* of his blundering, unwelcomed and unsuccessful efforts to trace the real author, and so to clear his own name.

To return to the account of the meeting—the proposed Plan was read clause by clause, a vote was taken on each one, and the scheme was passed with minor modifications, the chief being the addition of 'and Ireland' to the original title 'The Institute of Actuaries of Great Britain' and the reduction, by consolidation, of the number of clauses from thirty-five to twenty-nine.

The next step was to elect an Enrolment Committee of fifteen 'for the purpose of carrying out the Plan now approved'. The membership was identical with that of the Committee of fifteen appointed at the meeting of 10 June 1848.

The meeting concluded with a round of votes of thanks, one of special warmth being accorded to the Scottish Deputation, which had come 'in order to show the desire of the Scotch Offices to assist in carrying the proposal into execution'. On their return to Edinburgh, 'those Managers who had attended the London Meeting reported verbally what had passed and congratulated the Scotch Association on having at last succeeded in getting the London Actuaries more united than they had ever been'.

So, the end of the beginning came and the Institute was founded. The breach foreshadowed throughout the period of active preparation and now sure, was not yet fully revealed, since some of those who joined the Actuaries' Club on its formation in November 1848 were to go as far meanwhile as actually to become members of the Institute.

The Scheme, in the form of the Resolution approved by the meeting of 8 July 1848, is reproduced on pp. 20-2, and is dealt with more fully in Chapter III.

IT WAS RESOLVED

1. That an Establishment be formed, to be designated

THE INSTITUTE OF ACTUARIES OF GREAT
BRITAIN AND IRELAND

2. That the objects of such Institute be, The development and improvement of the mathematical theories upon which the practice of Life Assurance is based, and the collection and arrangement of data connected with the subjects of duration of life, health, and finance.

The improvement and diffusion of knowledge, and the establishment of correct principles relating to subjects involving monetary considerations and the doctrine of probability.

The nearer approximation to uniformity of practice, official and professional.

The settlement of points of professional and official usage, and protection generally to the members of the profession and the public.

The elevation of the attainments and status of the members of the profession.

The formation of a library, and the establishment of rooms for reading and conversation.

The free interchange of opinion and counsel in matters of difficulty, whether theoretical, official, or professional.

3. That the Institute consist of two classes of Members—Fellows and Associates.

4. That every Actuary, Assistant Actuary, or person performing the office of Actuary or Assistant Actuary to the Government or to any Life Assurance, Annuity, or Reversionary Interest Society in Great Britain or Ireland, in existence or completely registered on or before the 8th day of July 1848, if he shall have acted in such capacity previous to that date, shall have a claim to be elected a Fellow of the Institute without ballot or previous examination, provided that he shall make such claim and offer himself for enrolment on or before the 1st day of September 1848, and provided that he shall not be objected to by four-fifths of the Committee of Enrolment to be hereafter appointed.

5. That every Manager, Managing or Resident Director, Secretary, or other chief officer of any Life Assurance Society, in existence and completely registered on or before the 8th day of July 1848, shall have a claim to be admitted an Associate without ballot, provided he shall make such claim and offer himself for enrolment on or before the 1st day of September 1848, and provided that he shall not be objected to by four-fifths of the Committee of Enrolment to be hereafter appointed.

The Adopted Scheme

6. That any person desirous of becoming an Associate of the Institute, and not included in the above description or limitation, shall be proposed as such by two Members, and subsequently elected by ballot under regulations to be hereafter determined on.

7. That any Associate of the Institute who shall hereafter obtain an appointment of Actuary to the Government, or any Life Assurance, Annuity, or Reversionary Interest Society, and who shall, previously to such appointment, have obtained a certificate of competency from the Institute, to be hereafter determined upon, shall have a claim to be at once elected a Fellow of the Institute without ballot, subject to such regulations as may be hereafter appointed.

8. That it shall be lawful for the Fellows of the Institute to proceed at once to ballot for the admission of any candidate into their body who shall, previously to the aforesaid 8th of July, have been the Actuary of any Life Assurance Society, or who shall at the time of ballot be an Associate of the Institute without holding the office of Actuary, but who shall have obtained the certificate of competency, provided in either case such candidate shall be specially recommended by the Council for that purpose.

9. That the Institute shall possess the power of expelling any Member guilty of improper conduct, and each Member shall sign a declaration, on admission to either class, to conform to the Rules and Bye-laws.

10. That there shall be annually elected from the Fellows by the Members at large, a President and a Council of sixteen, including—Four Vice-Presidents, a Treasurer, a Registrar, and two Honorary Secretaries.

11. That the time and manner of the election of the President, Office-bearers, and other Members of the Council shall be made the subject of future Regulations.

12. That the Council shall annually elect three Fellows as Examiners, whose duty it shall be to examine candidates for certificates of competency, and to report the result to the Council.

13. That the mode of examination shall be subject to such regulations as the Council may hereafter impose, but it shall comprise the four following branches, viz.: Mathematical Theory; Vital Statistics; Computation and Construction of Tables; and Book-keeping and Office Routine.

14. That every Fellow of the Institute shall have the privilege of appending to his name the letters F.I.A. (Fellow of the Institute of Actuaries) or such other addition as may hereafter be determined on by the Council.

15. That every Associate of the Institute shall have the privilege of appending to his name the letters A.I.A. (Associate of the Institute of

The Institute of Actuaries, 1848–1948

Actuaries) or such other addition as may hereafter be determined on by the Council.

16. That there shall be three Auditors annually appointed to audit the accounts of the Institute, who shall be elected from the general body of Associates.

17. That there shall be Monthly Meetings during the session, the limits of which session shall be hereafter appointed. The objects of the Meetings shall be the reading and discussion of papers, conversation on points of interest theoretical and practical, balloting for and election of Fellows and Associates, and the transaction of other general business.

18. That all Fellows, Associates, and Honorary Members shall have the right to attend these Meetings.

19. That the admission of strangers shall be made the subject of future consideration.

20. That arrangements shall be made for the Meetings and proper accommodation of the Members.

21. That committees shall be constituted by the Council from the Fellows and Associates viz.: A Mathematical Committee, a Statistical Committee, a Legal, Parliamentary, and Commercial Committee, and such other Committees as may be deemed necessary.

22. That all papers proposed to be read at the Monthly Meetings shall be submitted to the Council, who shall decide on their fitness to be read, and also on their fitness to be inserted in the transactions of the Institute, in the event of such being published.

23. That the Council shall have power to recommend Honorary Members, to be elected by the Fellows and Associates.

24. That an Annual Subscription of £3. 3s. shall be contributed by each Fellow, payable in advance.

25. That an Annual Subscription of £2. 2s. shall be contributed by each Associate, payable in advance.

26. That there shall be an Annual General Meeting of the Fellows and Associates.

27. That the Administrative power of the finances, and the affairs of the Institute generally, shall be in the Council, subject to the control of the Fellows and Associates at the Annual General Meeting.

28. That the Council shall be empowered to prepare a Code of By-laws for the Government of the Institute, to be submitted for confirmation to a General Meeting of the Fellows and Associates to be summoned for that purpose.

29. That the Council shall hereafter consider the propriety of obtaining a Royal Charter of Incorporation.

CHAPTER II

THE FORMATION

The Enrolment Committee—Newspaper comment—The General Meeting of 14 October 1848—Formation of the Actuaries' Club

THE ENROLMENT COMMITTEE

The Committee appointed at the meeting of 8 July 1848 met first five days later. Eight members were present, with Hardy in the Chair, and the business transacted is shown in the following extract from the record:

The Minutes of the General Meeting held on the 8th instant were revised and agreed to. The Secretary was instructed to arrange the Resolutions passed at said Meeting (including the Report) for printing and to dispatch the same throughout the profession in like manner as the 'Proposed Plan' had been circulated.

It was agreed that for any emergency that might arise before the next meeting of this Committee the Secretary should refer to Messrs Hardy, Jenkin Jones and Ratray.

Agreed to a form of circular and also to a form of application for membership to be circulated with the printed Copy of the Resolutions.

Naturally, the first act of the Committee was to prepare and issue to prospective members of the Institute a letter giving details of the Scheme on which the Institute was based, drawing attention to the conditions for admission and setting a time-limit for making application. Also, of course, a form had to be sent for the use of candidates.

No actual complete copy of the letter, etc. has been found but, happily, one original member preserved the letter that he received and wrote on the back of it a copy of his application, which led to his admission as a Fellow of the Institute. The following copy is made from the document preserved in the book presented by Ralph Price Hardy to the Institute:

The Institute of Actuaries, 1848-1948

GUARDIAN ASSURANCE OFFICE,
LONDON, 22nd July 1848

ACTUARIES' INSTITUTE

Sir,

I am requested by the Committee of Enrolment to forward you the enclosed copy of a 'Plan for the Establishment of an Institute of Actuaries' adopted at a Special General Meeting of Actuaries, Secretaries and others connected with Life Assurance Companies,* held on Saturday, the 8th instant, and to request your attention to clauses 4 and 5, by which you will observe that all persons desirous of joining the Institute must make their claim on or before the 1st day of September next. Appended hereto is a Form of Application.

I remain, Sir,
Your most obedient Servant,
(Sgd) J. J. CLEGHORN
Secretary to the Committee

COPY

FORM OF APPLICATION

I, JOHN KNOWLES of 32, New Bridge Street, Blackfriars, having on or before the 8th day of July 1848 acted in the capacity of* Secretary and Assistant Actuary to the London and Provincial Law Assurance Society of No. 32, New Bridge Street aforesaid, request to have my name enrolled as a Fellow of the Institute of Actuaries of Great Britain and Ireland in conformity with the Resolutions passed at the General Meeting on the 8th July 1848.

<i>Name in full</i>	JOHN KNOWLES
<i>Date</i>	25th Aug. 1848

* Read Resolutions Nos. 4 and 5.

THE SECRETARY,
THE ENROLMENT COMMITTEE

The Enrolment Committee met next on 27 July 1848, with Griffith Davies in the Chair. Four items of its business are worthy of recall even now. The relative Minutes are reproduced with such comment as seems to be desirable:

1. The attention of the Committee was directed to the copy of a Bill now before Parliament entitled 'A Bill to make Life Policies assignable at Law'; also to a letter from Mr G. L. Finlay of the Edinburgh Life Office containing suggestions in respect of said Bill, and expressing a hope that

The Enrolment Committee at Work

a Committee might be appointed to watch over its progress—the Secretary was instructed as to a suitable acknowledgement of Mr Finlay's letter and to state that this Committee does not feel authorized to appoint a sub-Committee in reference to said Bill but that its progress will have their individual attention.

This matter, clearly, was not within the scope of the Committee and the mention of the Bill is strange—yet stranger is the irony of the event that a topic touching so closely one of the questions put forward by the Committee of ten at the meeting of 10 June 1848 should have forced its way, as it were, into the consideration of a Committee engaged in the formation of the Institute that had been preferred to an Association of Managers.

It was reported at the next meeting of the Enrolment Committee that the Bill had been postponed.

2. Read applications for enrolment numbered 1 to 28 inclusive all which were admitted with the exception of Nos. 10, 12 and 14 in respect of which the Committee desired further information.

This is the forerunner of frequent similar references. Most of the questioned applications seem to have been accepted in the end: virtually no record has been preserved of the names of the candidates or of the nature of such queries as some of them provoked. Occasionally, 'other parties' were approached by the Committee 'for the purpose of obtaining further information'.

3. The Committee determined on the form of circular announcing enrolment and also on the form of receipt to be given on payment of subscriptions, such receipts to be signed by two members of the Committee and countersigned by the Secretary.

The number of signatures to each receipt is rather large but, and perhaps intentionally, impressive.

4. Read letter from Mr Galloway announcing that it is not his intention to offer himself for enrolment and requesting to be allowed to withdraw as a Member of this Committee—the Secretary was instructed to reply to Mr Galloway's letter expressing the regret of this Committee at the decision he had come to.

This unwelcome announcement meant that Galloway had joined the small, but gradually growing, band of unreconciled actuaries who,

in November 1848, cut themselves off from the Institute by forming the Actuaries' Club. It is tempting but dangerous to speculate on matters of which there is no record, but it seems to be safe to suggest that several of those who thus joined the Club did so only after long hesitation and from a compelling sense of duty. Ansell, Downes, Goddard and S. Ingall declared themselves, almost certainly, by their refusal to join the Committee of fifteen; Galloway went on through that Committee to the Enrolment Committee before making the final choice; others waited even longer before deciding irrevocably.

During the period of six weeks allowed for the presentation of applications for enrolment, the Committee met six times. On 10 August it 'directed that the Report of the meeting held on the 8th July last, about to be published in the *Post Magazine*, be extensively circulated among the Actuaries, Secretaries and others connected with Life Insurance Societies'. On 17 August, certain applications were 'referred to the consideration of a special meeting of this Committee to be summoned for that purpose'. Also, the 'Committee directed a form of circular to be prepared to be addressed to those persons who shall not have sent in their claims for enrolment by the 26th instant'. From meeting to meeting, the Secretary reported the total money received by way of fees, but it was not until 24 August that he 'was authorized to pay the same into his Bankers and to continue the same course in respect of future receipts until instructed to the contrary'.

An inquiry was received from Mr A. W. Robertson of the 'Experience' Office, Edinburgh, requesting to be informed whether a member, being 'the Manager of a Scotch Office', could be represented by his 'London Agent' at meetings of the Institute. The Committee decided to tell Mr Robertson 'that his letter would be brought before the Council at the proper time'.

The fixed date, 1 September 1848, being passed, the Enrolment Committee held a 'special meeting' on 5 September 1848 at the 'Guardian' Office (where, indeed, it met throughout). Hardy was in the Chair and ten members altogether were present. Various outstanding applications were considered and, as far as possible, settled. In some cases, Associateship was granted though Fellowship had

The Completion of Enrolment

been claimed. The Secretary reported that intimation of acceptance by the Committee had not led universally to payment of subscription and he was instructed to ask again for the money.

One admitted Associate (Hugh McKean) withdrew and 'the Committee ordered his name to be struck out from the list'.

It was resolved also:

That a General Meeting of the Members of the Institute be called for Saturday the 14th October next at 12 o'clock at the office of the Guardian Assurance Company to receive a report from this Committee, to elect a President and Council and to determine on such other proceedings as may then be deemed necessary in accordance with the Resolutions of the 8th July last.

The Committee continued to meet. On 12 September, John Watson's application was accepted that his enrolment be changed from that of Associate to Fellow.

At another 'special meeting' on 3 October, it was decided to ask enrolled members who had not paid their subscriptions to do so 'previous to the General Meeting' and it was resolved 'that no member be permitted to vote for the election of the Council until his subscription be paid'. There was also a rather curious decision 'that it be recommended to the General Meeting that the Registrar be not a member of the Council as provided by Resolution 10 of the 8th July last'. The reference is to Clause 10 of the adopted Scheme: the Committee changed its mind two days later.

It was time now to lay down procedure for the important matters to be settled at the General Meeting of 14 October 1848 and the Committee resolved:

That a list of the Fellows and Associates be alphabetically arranged with the distinctive designation of 'Fellow' and 'Associate' attached to their names for the purpose of electing from the Fellows, the President, Officers and other members of the Council for the ensuing year and that the following Regulations be observed in such election.....

Other decisions were incorporated in the Report of the Committee and will be found in the copy reproduced below.

At the final meeting of the Committee on 13 October 1848, the notice convening the General Meeting having been issued previously of course, one outstanding application was accepted and the case 'was

The Institute of Actuaries, 1848-1948

admitted for enrolment as from the 5th instant at which date it should have been determined on'—an early example of 'dating-back'!

The subscriptions received were reported 'to be £328 13s.'

The manuscript book from which these extracts have been taken contains only one more used page and that bears the unsigned minutes of the 'Friendly Societies' Committee's Meeting of 15 December 1874.

The Report of the Enrolment Committee to the General Meeting of 14 October 1848 was issued under the title 'Institute of Actuaries of Great Britain and Ireland' as follows:

Your Committee have to Report:

That the total number of Members enrolled is one hundred and thirty-one, of whom ninety-four are Fellows, and thirty-seven Associates.

That the total amount of Subscriptions received is £287. 14s.

Your Committee have had under their careful consideration the question as to the best and fairest mode of proceeding in the Election of the President, Council and Office-bearers, and have unanimously resolved to suggest that the following Regulations be observed at the General Meeting to be held on the 14th October next for that purpose, viz.:

The President to be first elected by ballot.

Each Member then to give in his printed list, after having erased from it all but the names of the sixteen Fellows (or any less number) whom he may wish to select for the Council. Any list in which this regulation is not accurately observed to be invalid.

The names of the sixteen Fellows obtaining the majority of votes having been ascertained by the scrutineers, to be declared by the President and set up in the room conspicuously.

Out of these sixteen, a ballot to be taken for the four Vice-Presidents, and from the remaining twelve names a ballot to be then taken for the Treasurer, the two Secretaries and the Registrar successively.

The three Auditors to be then elected.

Your Committee would remind the Members that the Council are to be elected from the Fellows and the Auditors from the Associates.

Your Committee cannot help congratulating the Members of the Profession upon the fact of so large a number of the body having enrolled themselves, and trust that the zeal and cordiality which have existed up to this period, will still be exerted to carry the great aim and objects of the Institute into full and complete effect.

LONDON, 5th October 1848

Newspaper Comment

On a copy of this Report (in the 'Hardy' collection) there are some marginal manuscript jottings and on the back is written—if it have been deciphered correctly:

Counsel [*sic*] to take every means in steps for prevailing on absent members of profession to join the Institute.

NEWSPAPER COMMENT

Meanwhile, some public notice was being taken of the new Institute. Among the newspaper cuttings in the book presented by Ralph Price Hardy is one (like several others, not precisely dated) from the *Post Magazine* headed 'The Institute of Actuaries'. Internal evidence shows that the article appeared not very long after the meeting of 8 July 1848. It mentioned the surprising unanimity of the formation-meeting composed of men of talent accustomed to come to independent decisions and rebuked the *Athenaeum* (of 22 July) for 'calling upon the public press to write down the very establishment of the Institute in the form in which it has been so cordially received'. The basis of this attack was the limitation of the objects of the Institute and the insufficient liberality of its constitution. The *Post Magazine* went on to state that the Institute had in view 'other advantages which result from bringing together the members of a particular profession, who, fortunately for society, can scarcely raise their own standard of mental acquirements, or professional experience, without, at the same time, consulting the interests of, and conferring a benefit upon, the public at large'. The Institute, said the article, was charged with being 'a clique—a clique intentional—a clique prepense', but the *Post Magazine* pointed to the very numerous meeting that had formed the Institute 'with only a single dissentient voice'. Finally—the year was 1848—the paper proclaimed that it was not so enamoured of republicanism as at once to reject every institution not founded on a 'republican' basis. This is a reference, apparently, to criticisms of the management of the Institute by Fellows, no sufficient voice being allowed to Associates. The article showed how much influence the latter could have.

Another contemporary cutting, from the same source, referred to the responsibilities of actuaries, the difficulty of selecting suitable men and the absence of recognized tests. It proceeded:

The requirements in the character of an actuary are—a high degree of mathematical knowledge, the most unspotted integrity and a practical

The Institute of Actuaries, 1848-1948

acquaintance with the management of large accounts, so as to present their most involved details in the simplest form; he must be capable of bearing opposition without irritation and of supporting the views which he believes to be just, without arrogance—he must possess a thorough command over himself, a complete acquaintance with the world and that suavity of manner which enables a man to perform a difficult duty without imputation, but to meet with patience the objections of the ignorant or the schemes of the interested.

The article showed how the Institute's tests of competence would help towards improvement and, though not obligatory, would be recognized—the absence of a certificate becoming more and more noticed. After a reference to John Finlaison as 'the Government Actuary', the paper expressed the view that the object of the leaders of the Institute would 'still be to conciliate the opposition and secure the suffrage of all'.

A third cutting, from the *Post Magazine*, introduced the Report of the formation-meeting of 8 July, and, after stating that, already, 140 applications had been made to join the Institute, went on thus:

It could scarcely be expected that the members of the Old Committee, whose report and suggestions were so unceremoniously set aside, would readily apply to join an Institute the necessity for which they thought did not exist. But the fact of no one else entertaining this opinion but themselves, is we believe gradually working its way and they are as gradually and wisely adding their names to the list of the enrolled. Indeed, we believe, were it not for some sort of understanding, supposed to have been come to at a dinner party, that none of that party should join, we should ere this have had the pleasure of hearing that all the Old Committee had determined to give the Institute the benefit of their countenance and support, and at this moment we believe B is quite prepared to join if A will. It is therefore very gratifying to find that the hesitation of the few who have not joined, is not from an adverse feeling to the Institute but from a desire to be associated with old associations.

The reference to 'a dinner party' is presumably to that mentioned in Chapter I, on p. 14, as intended 'to be held at the York Hotel in New Bridge Street' (Higham). Perhaps, the passage as a whole was meant to be taken by the dissentients as an olive branch, but, if so, it failed in its purpose. Read in such light as there is on the history of these early days, it seems to be an ill-conceived effort, giving an unbalanced view

First General Meeting of the Institute

and calculated almost to mislead. Any unreconciled actuary who may have paused to consider the appeal, was not likely to be impressed by the subsequent admission that some were being enrolled as Fellows whose only qualification was that they held the appointment of Actuary. But, said the article, things would improve and it proceeded to add that 'the greatest care must be taken in the appointment of officers'. The obvious truth of this, and the alleged failure of the young Institute wholly to conform with the principle, came home to roost a few years later when the great Scottish secession occurred.

Various remarks were made in Chapter I concerning the enigmatic conduct of Griffith Davies and some criticism was offered of Higham's statement that, being misled by his Assistant and another friend after the meeting of 10 June 1848, Davies was compelled to relinquish the great position of first President of the Institute. This sacrifice, if so made, was not known to the writer of the article just noticed, for it said 'With regard to the President, it cannot be doubted for a moment that Mr Griffith Davies will be unanimously voted to the Office'.

THE GENERAL MEETING OF 14 OCTOBER 1848

For details of this meeting, reference has been made to another cutting from the *Post Magazine* in the 'Hardy' collection.

Peter Hardy was in the Chair and Griffith Davies, as the senior actuary present connected with a Life Assurance Office, proposed John Finlaison as President. He was elected by acclamation and, in his reply, is reported as having said:

Mr Davies and myself have been long in business together and it would be, I fancy, a difficult thing to say who is the senior.

Jellicoe expressed his regret that there should be any want of co-operation on the part of some of the members of their profession:

He felt quite sure, however, that it was a want which would exist for a very short time; at all events, it could not be looked upon as having any influence on their present views or ultimate objects; they had only to be true to themselves, to work together for the common end, to lose sight of any little selfish considerations, to entertain a due respect for the claims of each member of the body and especially for that younger portion of it which stood most in need of friendly counsel and assistance.

The Institute of Actuaries, 1848-1948

The new President recited various legislative references to actuaries and added: 'At present every little clerk of a Savings Bank called himself an actuary and the public had no means of discriminating between the qualifications of the two.' This grievance, if grievance it be, exists still. In 1888, as is mentioned in Chapter v, p. 160, a strong protest was made by a member of Council on the subject generally.

Hardy moved a vote of thanks to Griffith Davies

for the valuable services which he had rendered to the infant Institute... there would be but one sentiment amongst the profession as to the loss which the Institute would experience by being deprived of Mr Davies' more active service in the prominent, very prominent, position which would have been unanimously awarded to him, in the government of the Institute, had Mr Davies' state of health and numerous other avocations admitted his acceptance of it.

The profession regarded him

almost in the light of a father... from the very first contemplation of the formation of an Institute, Mr Davies had lent it his most kindly support and had used his great influence to promote it by every means in his power. Mr Davies, he rejoiced to say, was the first Fellow to claim enrolment, the first to pay his contribution; Mr Davies had attended nearly every meeting* of the Enrolment Committee and had used his utmost exertions to bring about unanimity and good feeling amongst those members of the profession who had not regarded the Institute with the same kindly feelings that he did; and when it was remembered that amongst those gentlemen who did not, he regretted to say, at present feel disposed to enter the Institute, were numbered some of Mr Davies' oldest and most respected friends, the members of the Institute of Actuaries could not but feel that they owed a deep debt of gratitude for the support of such a man.

Jenkin Jones, seconding Hardy, said that every effort had been made to induce Mr Davies to accept office and that it was only from the conviction that Mr Davies's state of health would preclude him from giving due attention to the duties, that the Committee was induced not to persevere in its efforts to secure his active co-operation. 'Life Assurance Societies are greatly indebted to Mr Davies who has

* This is not true—of 11 recorded meetings, Davies attended 5: Hardy was present at 8.

Dinner at the London Coffee-house

qualified for the office of Actuary a large number of the present and most experienced members of this Institute.'

The President suggested and it was agreed that the Vice-Presidents should draw up an Address to Griffith Davies, 'expressive of the deep regret of all the Members of the Institute that his ill-health renders him unable to take any part in its Management'.

A list was given, in more or less alphabetical order, of seventy-eight Fellows and fifty-three Associates. Among the Fellows were Engelbach of the 'Alliance' and Rainbow of the 'Crown'. Both of them thus went as far as actually to join the Institute, but they repented soon. The date of Engelbach's withdrawal is not known: his name appears in the printed list of members issued in 1849 but not in that for 1850. On the other hand, the Minutes of the Council contain no record of his resignation. The apparent contradiction may be reconciled by supposing that he made known his intention, more or less informally, towards the end of 1848 and took no further steps. Rainbow was a Fellow for more than a year; his resignation was received by the Council on 1 November 1849. Both these men were original members of the Actuaries' Club and it is a pleasant feature in an otherwise unhappy record that Rainbow seems to have tried both long and hard to implement the suggestion of his name. The storm, however, was to last for many years before the authentic sign of cessation should appear. Rainbow's patience must have been tried sorely and perhaps his burden was made the heavier by the obviously unfavourable impact of his name upon his conduct—it may be hoped that he was sustained not only by a consciousness of mission but also by a sense of humour. One or two other early, though not original, members of the Club (for example, W. T. Robinson of the 'Minerva' and B. Hall Todd of the 'Standard') were Fellows of the Institute, according to the list in *J.I.A.* 1, 268. Robinson, a member of the first Council, went to the Club in 1853; Todd was received in 1861.

In the evening of this historic day, a dinner was held at the London Coffee-house, with the President in the Chair. Appropriate reference was made to his part in stopping, some years before, the loss of £8,000 a week to the Nation by reason of the unsuitable terms on which the Government sold Life Annuities. Higham has some amusing references to this subject in his book.

A special toast was drunk, in his absence, to Morgan of the

'Equitable'. He was described as not a supporter but not an opponent of the Institute.

Every project, however sober, must have its quaint friends or enemies. The 'Hardy' collection contains a choice example which is reproduced without comment (save that 'National' in 'National and Provincial Law Life Office' is a mistake for 'London') and with its actual spelling:

PROPOSED INSTITUTE OF ACTUARIES

7, ST MARTIN'S PLACE,
TRAFALGAR SQUARE,
LONDON, *December 7th 1848*

Sir,

Permit me to hand you the copy of a letter written to Mr Cleghorn, the Secretary to the Committee of the proposed Institute of Actuaries.

Within the last few days I have been presented with the Report of the July Meeting; and read, in the Introduction: 'If the Office which charges the lesser premium upon a certain risk be right, then the Office charging the greater premium is lessening its own business, and discouraging Insurance, by rendering it unnecessarily hazardous; while, if the contrary be the fact, then the Office charging inadequately is damaging itself, by incurring a certain loss, possibly to an extent affecting its stability.'—Surely, the writer does not imagine that all Mutuals will classify—or Mixed Associations, forego Participation; and Trading Companies, relinquish the Surplus Premium! He must, or should, know, that the Scale of Premiums is adapted, not so much to the risk of life and value of Policy, as to the deliberate policy of the Mutual, Participation, and Trading bodies!—And are the Prepounders of this project about to occupy themselves with this policy? And will they do so conscientiously; and each submit an unbiassed, independent ultimatum, to his own Executive and Constituency?

Being not disinclined to sanction an Assurance Institute (if at all feasible) upon consistent, just, and sound principles, I thus trouble you,

Very obediently yours,

(Sgd) JOSEPH MACARDY

TO THE CHIEF OFFICIAL,
NATIONAL AND PROVINCIAL LAW LIFE OFFICE

A Strange Communication

COPY

NATIONAL ASSURANCE AND INVESTMENT ASSOCIATION,
7, ST MARTIN'S PLACE, TRAFALGAR SQUARE,
LONDON, *July 5th* 1848

Sir,

From a wish to contribute to a conciliatory feeling and sound practice amongst our Offices, I shall cheerfully give in my adhesion to your 'Proposed Plan', if Business be made the substantive, or distinctive style, instead of Appointment, or Office.

A liberal, legitimate project;—the frank and popular plan of an Insurance Institute, will have incontestible claims to support; but, to my experience, your classification is an egregious blunder:—'Managers' to rank as a 'Second Class'; and to be still further disparaged with a Minimum Subscription!

I do not believe that the want of the Government Calculator's arcana is a practical inconvenience; I do not believe that the Returns of the Registrar-General would justify reduced Premiums; nor do I think that mathematical science can, with safety, alter our general basis. For, omitting Finlaison, this basis has the assent of every competent authority, from Price to De Morgan. Any plan that has tendencies to conciliate our Proprietary, Mixed and Mutual, Offices; to regulate that practice which allows 35 per cent. on first Premiums; to demand from Proposers, Referees who will render honest testimony without extending their hand for a paltry honorarium; any plan having these, and other important practical tendencies, will be a public good; but, conjectural opinion, recondite disquisition, or abstruse computation will prove irrelevant and tiresome to every man of clear practical purpose.

Whilst I decline a Class project, I shall be most happy to give my support to a liberal Insurance Institute.

I remain, Sir, yours very obediently,

JOSEPH MACARDY

J. J. CLEGHORN ESQ.
GUARDIAN OFFICE

[Addressed on back to] *J. Knowles Esq.,*
National & Provincial Law Life Office,
32, New Bridge Street

The first regular meeting of the Institute was held in the Board Room of the 'Guardian' on 29 January 1849. The President said that the Public and Parliament trusted the members of the Institute and they responded 'to that confidence by forming not a Club but an efficient literary and scientific school'.

Hardy spoke of Griffith Davies's 'unshaken fidelity to the interests of his younger brethren in the profession when those interests were in some measure threatened and assailed'.

The Address previously decided upon, and in the terms shown in the Minutes, was presented to Griffith Davies: written on vellum, by order of the Council at its first meeting, on 25 October 1848, it was laid by Jellicoe on the Council Table on 18 January 1849 and signed by the members present. Mr Owen Jones's charges of £10. 6s. were ordered, on 1 February, to be paid.

The following quotation from the *Morning Herald* shows the interest that the Institute had aroused in circles wider than those concerned directly with professional matters or Life Assurance business:

INSTITUTE OF ACTUARIES

On Saturday last a meeting was held at the Office of the Guardian Assurance Company, of the actuaries of Great Britain and Ireland, for the purpose, we believe, of confirming the constitution and laws of a society which now exists as the 'Institute of Actuaries of Great Britain and Ireland'. The objects they have in view are stated with sufficient conciseness in the first paragraph of their laws. They wish 'to elevate the attainments and status of all who are engaged in occupations connected with the pursuits of an actuary; to extend and improve the data and methods of the science which has its origin in the application of the doctrine of probabilities to the affairs of life, and from which life assurance, annuity, reversionary interest, and other analogous institutions, derive their principles of operation; and as their peculiar province they undertake the investigation of all monetary questions involving the consideration of interest and probability, either in their combined or separate relations'. Considering the responsible position in which these gentlemen are placed, and the importance to society generally of the investigations to which their attention is directed, it does appear highly expedient that some such association as that now established should be formed.

There can be no doubt that evils of great magnitude have arisen from the ignorance which generally prevails, not only as to the science itself,

More Newspaper Comment

but as to the professors of it. The term 'actuary' having been, until of late years, 'caviare to the million', a mere 'vox et pretereā nihil !'. Nothing is more notorious than that the numberless associations existing throughout the country, under the names of 'Friendly Societies', 'Odd Fellows', 'Foresters', &c., are, in very many instances, based upon false principles, and, for want of competent advisers at the outset, are likely to terminate in loss and disappointment to the contributors; and, as regards societies of the like nature but of high pretensions, it is equally well known that clauses are to be found in their deeds of settlement of the most unjust and mischievous tendency, 'the practice heretofore having been to consult upon these points the legal advisers merely, who, with that self-reliance for which the profession has earned so well-merited a reputation, have attempted to regulate the delicate machinery which the practical actuary is alone competent to deal with'. The decisions, too, in our courts of law on matters connected with the business of an actuary, are frequently incorrect and indicative of the total ignorance which prevails in reference to them; and we believe it may be said with truth that a mass of legal precedents are built up upon an entire misconception of the nature of life assurance, and of those principles which the well-educated actuary is alone master of, and which, had he been duly consulted, must have been long ere this fully established. But the evil does not stop here. For want of the actuary's knowledge our legislative enactments in relation to these subjects are pregnant with disastrous consequences, and while they seek to protect those whose circumstances compel them to mortgage their patrimony or their expectations, oblige them to resort to the most ruinous expedients to supply necessities which, but for the ill-advised interference of the legislature, might be readily and economically satisfied. With these facts before us, we are glad to see that measures are being taken to bring into more prominence and greater activity so useful and intelligent a body as the actuaries undoubtedly are, and we hope the time is not far distant when they will be found devoting their energies to those subjects of a somewhat cognate character, for which their education and habits of thought peculiarly fit them—such, for instance, as the more abstruse questions of our national and political economy, and the investigation of the many equivocal theories of banking and currency, which from time to time 'fright the isle from its propriety'.

FORMATION OF THE ACTUARIES' CLUB

The Club was formed on 4 November 1848 at a meeting in the 'Atlas' Office when there were present:

C. ANSELL	'Atlas'
T. GALLOWAY	'Amicable'
C. H. LIDDERDALE	'Sun'
C. INGALL	'London'
F. A. ENGELBACH	'Alliance'
E. DOCKER	'London Life'
J. M. RAINBOW	'Crown'
J. GODDARD	'Rock'
S. INGALL	'Imperial'
J. J. DOWNES	'Economic'
W. S. DOWNES	'Law'

These eleven actuaries decided to invite M. Saward of the 'Promoter' and W. S. B. Woolhouse of the 'National Loan Fund' to join them, and the profession, in London, was riven in twain until 1884.

Further reference to the Club will be made later; at this point, only the accomplished fact of disunion falls to be recorded. The old antagonists have passed away long since and the ancient controversy has been closed for more than 60 years. When all allowance is made for human frailty and even for deliberate wrong-thinking, there is left a firm impression that men on both sides felt deeply, acted reluctantly and tried, so long as hope remained, first to avoid and then to heal the breach. Of these men, it shall be said in Walter Scott's words:

Their swords are rust, their bodies dust,
Their souls are with the saints, we trust.

One last reflexion may be offered concerning Griffith Davies. It has not been possible to draw from the fragments that remain a finally convincing picture of the part that he played. Perhaps he was deceived and, with almost quixotic loyalty, bore the cost himself: perhaps he was ill and his regretful friends realized that he could help only as his strength permitted: perhaps he was weak, but lovable. Whatever the ultimate, unknown truth may be, his record is one of which no man should be ashamed.

CHAPTER III

THE INSTITUTE OF 1848: ESTABLISHMENT 1848-1855

The constitution of the Institute—The Council and its tasks· Recruitment; Bye-Laws and government—Premises and staff—Meetings, Members and miscellaneous matters—External relations—The secession of many of the Scottish Members—The Committee to consider the present state of the Society's affairs

'The Institute of 1848' is a term taken from the Royal Charter of Incorporation, granted in 1884, and in itself is a convenient description of the Institute during its first 36 years, throughout which the actuarial profession in England remained significantly divided. From 1848 until 1884, the Actuaries' Club and the Institute were at enmity—no weaker expression will fit the facts—and it was a happy as well as probably an essential feature of the successful application for the Charter that it embraced all the members of the Club and so broke down finally the wall of partition. The story of the Charter is told in Chapter IV: interim references to the Club will show, almost without exception, a state of continuing and embittered estrangement.

THE CONSTITUTION OF THE INSTITUTE

The Institute was designed as a body that should organize, develop, govern and secure proper recognition of the actuarial profession in Great Britain and Ireland. It was not a Trade Society, although the great majority of its members would perform their professional work mainly in connexion with life assurance and would be employed by Offices transacting that business. Life assurance was mentioned prominently in the first object of the Institute, but with regard to the development of its theoretical basis, and there followed a reference to the general 'subjects of duration of life, health, and finance'.

The second object was couched also in wide terms, since it dealt

with ‘the establishment of correct principles relating to subjects involving monetary considerations and the doctrine of probability’.

The remaining objects were stated in a rather miscellaneous manner; some touched upon methods rather than principles; one mentioned uniformity of practice in a way such as to recall (perhaps deliberately) the recommendations of the original Committee of ten; yet another, the elevation of the attainments and status of the members of the profession, foreshadowed the long and patient history of the Institute’s educational work.

Necessarily, the infant Institute provided for the admission of approved existing practitioners on comparatively easy conditions, though by no means automatically. Election to Fellowship after the initial period was to be on terms which, while flexible, had some reference to possession of the certificate of competency. Article 12 required that three Fellows should be elected annually as Examiners whose duty it should be ‘to examine candidates for certificates of competency, and to report the result to the Council’, and Article 13 specified Mathematical Theory, Vital Statistics, Computation and Construction of Tables, and Book-keeping and Office Routine as the four ‘branches’ in which examination was to be made.

It is worthy of special note, also, that the last Article (29) required the Council to ‘consider the propriety of obtaining a Royal Charter of Incorporation’.

The membership of the Institute consisted (by Article 3) of two classes—Fellows and Associates. The latter were not required to have passed any of the Examinations. A further class, of Honorary Members, was recognized by Article 23 and yet another, that of ‘Official Associates’, was established on the initiative of the Council.

THE COUNCIL AND ITS TASKS

The first Council of the Institute is set forth on the fly-leaf of Vol. I of the Minutes of Council. Against each member’s name is placed that of the Office in which he was employed, an example of the view held then that an actuary in his professional association represented his Office. This idea was strongly evident in the early history of the Actuaries’ Club. Gradually, the development of professional consciousness has effaced this open reference to the employing Offices,

The First Council

which are mentioned now only, and in some cases, in the List of Members' Addresses.

The actual wording of the fly-leaf, as originally written, is reproduced thus:

NAMES OF THE FIRST COUNCIL OF THE INSTITUTE OF ACTUARIES

(appointed 14 October 1848)

President:

JOHN FINLAISON. The Government Actuary.

Vice-Presidents:

PETER HARDY, F.R.S. Actuary to the 'Mutual'.

CHARLES JELICOE. Actuary to the 'Eagle and Protector'.

DAVID JONES. Actuary to the 'Universal'.

J. J. SYLVESTER, F.R.S. Actuary to the 'Equity and Law'.

Treasurer:

F. G. P. NEISON, F.L.S. Actuary to the 'Medical and Invalid'.

Secretaries:

JENKIN JONES. Actuary to the 'National Mercantile'.

ROBERT TUCKER. Actuary to the 'Pelican'.

W. M. BROWNE. Actuary to the 'Westminster and General'.

GILBERT L. FINLAY. Actuary to the 'Edinburgh'.

WM. E. HILLMAN. Actuary to the 'Star'.

JOHN LAURENCE. Actuary to the 'London Assurance'.

JOHN LE CAPPELAIN. Actuary to the 'Albion'.

WILLIAM RATRAY. Actuary to the 'Victoria'.

WM. THOS. ROBINSON. Actuary to the 'Minerva'.

ARTHUR SCRATCHLEY, M.A. Actuary to the 'Western'.

WM. THOS. THOMSON. Actuary to the 'Standard'.

Registrar:

J. J. CLEGHORN. Assistant Actuary to the 'Guardian'.

The Council met first on 25 October 1848 to begin the work of establishing, guiding and managing the Institute. The outline of its task had been determined by the potential members of the Institute: the Council, chosen at the General Meeting of 14 October, had now to take up a variety of hard, practical jobs; Recruitment, Bye-Laws,

Council Procedure and General Government, Premises and Staff, Meetings, Finance, External Relations—all these and more (in addition to the vital Educational Work, the formation of a Library and the issue of a Journal) had to be considered and arranged on the basis of the Constitution accepted by the meeting of 8 July 1848.

RECRUITMENT.

This relatively short but crowded epoch ended with the secession of a large and important body of the Scottish members, but it began with a determined effort to bring in the surprisingly numerous actuaries who had not been enrolled.

On 25 October 1848 the Council decided that 'in order to carry out the Resolution of the General Meeting of the 14th instant' it deemed 'the most effectual means of gaining the co-operation of the outstanding Members of the profession to be by the individual efforts of the Members of the Council' and it was resolved 'that each Member should endeavour to induce as many of his friends to join the Institute as possible'. This was a general appeal, by no means limited to the small body of influential men who, a few days later, formed the Actuaries' Club. These, though out of sight, were much in mind, for on 4 January 1849 the Registrar, Cleghorn, 'called the attention of the Council to the fact that the Actuaries of several Offices not members of the Institute had formed a Club or Association and that among the members of it were several gentlemen who had previously expressed their opinion that such an Association was unnecessary'. The stress of the time is apparent in the tone of this rather odd and somewhat saucy communication, which was merely recorded.

The Council took further action regarding those actuaries, etc. who were described, with delicate ambiguity, as 'outstanding Members of the profession', for, on 1 February 1849, it decided to communicate with them 'with the view of inducing those gentlemen so far as can be without compromising the dignity of the Institute to become Members thereof'. A week later, the Committee charged with this matter submitted the following draft letter, which was approved to be 'sent forthwith to all the outstanding Members of the profession, who were eligible on the 8th July last':

Efforts to bring in outstanding Actuaries

Dear Sir,

The success which has attended the formation of the Institute of Actuaries has been such as to afford the highest satisfaction to myself and the numerous members of which it is composed; and the benefits which it was anticipated would result from its establishment to the profession generally are already beginning to be sufficiently apparent.

At the same time neither myself nor my colleagues are insensible to the advantage which would accrue to the profession and the public from a more complete unanimity of action, and being persuaded that you are not indifferent to the attainment of so desirable an end, I beg leave to call your attention to the subject, and to express on behalf of the Members and myself, how much satisfaction it would afford us, should you think proper on consideration to give the Institute the benefit of your valuable co-operation.

I enclose for your information and guidance a Copy of the Laws as at present settled and have the honour to be

Dear Sir,

Your most obedt. Servant

(signed) JOHN FINLAISON
President

On 22 February sixty-six letters were laid on the table for the signature of the President. Some twenty-five replies are recorded as having been received; seven came from members of the Actuaries' Club. All these last and most of the others were unfavourable, but no details are given in the Minutes. The temper of the Club at this time is shown by the fact that J. A. Higham ('Royal Exchange'), a Fellow of the Institute, was proposed for membership of the Club on 2 December 1848, but at the next meeting the nomination 'was by consent withdrawn'. Higham resigned from the Institute in November 1851, joined the Club and came back to the fold in 1884, under the Royal Charter. There is some evidence that he sought to exercise a mediating influence both during his membership of the Institute and after his secession from it. On 9 January 1851 the Council 'took into further consideration the Resolutions proposed by Mr Higham viz.:

That this Council on reviewing the history and present position of the Institute of Actuaries, are highly gratified by the progress which has been

made, and anticipate with confidence the ultimate accomplishment of all the objects for which it was founded.

That this Council nevertheless are of opinion that the interests of the profession would be promoted (as their own pleasure would be enhanced) by the accession of Gentlemen who were deterred from joining the Institute on its formation by apprehension which the experience of the Institute, and that of the Club into which those Gentlemen subsequently formed themselves, have alike shown to be groundless. That the Council accordingly invite those Gentlemen to merge their Club in the Institute—the smaller body in the larger—the younger in the older. That if the dissolution of the Club be objected to by its Members, the Council invite them to join the Institute in their individual capacity, seeing no reason why the two Societies should not exist together, the Institute comprising the whole Actuarial Profession, and the Club continuing to be composed of Gentlemen entertaining to a certain uniformity of opinion.

That the Council will recommend to the Institute for immediate election as Fellows, without examination, of any gentlemen who may join the Institute in compliance with this invitation, and will also recommend the selection from their number of Members to fill all the four vacancies in the Council which by the Laws of the Institute must be supplied at the next Annual Meeting.

That the foregoing resolutions be communicated to the Secretary of the Actuaries' Club.

That if it should be necessary to make any vacancies in the Council in pursuance of the 5th foregoing resolution, the same be determined by Lot from a list containing the names of all the present Members and ex-Members of the Council.

It is difficult to see how a vacancy could be caused by drawing the name of an ex-member, but the main point is the laconic record:

The resolutions were put in the aggregate and lost.

The wound in the body would not heal now. Higham (son of J. A. Higham) says in *Early History*:

A proposal to the Council by my father in 1851 in favour of a fusion was rejected; but later on it was the Club that became embittered, and in spite of there being no rule to that effect, no Institute man was elected to it, though the Institute by that time would have welcomed friendly relations.

The First Bye-Laws

BYE-LAWS

The drafting of the Bye-Laws was referred on 25 October 1848 to a Committee. The first result was the recommendation and the establishment of a new Class of Members—the ‘Official Associates’—who were ‘Chief Officers (not being Actuaries) of Life Assurance, Annuity and Reversionary Interest Societies’. It was decided that the names of Fellows and Official Associates be printed together in alphabetical order under the heading ‘Fellows and Official Associates. Those marked thus * are Fellows’. In November 1849 it was agreed that one of these Official Associates be appointed an Examiner but, doubtless nicely, he declined to act.

A Special General Meeting of the Institute was held on 6 January 1849 for ‘confirming a Code of Bye-Laws for the government of the Institute, considering undecided claims for immediate admission of members’ (the hard residue left after the Council’s own scrutiny) and other business. Prints of the proposed Constitution and Laws were produced to the Council on 28 December 1848. Hardy (V.-P.) was in the Chair at the meeting of 6 January 1849—an indication, frequently repeated, that the President’s health was not good—and there were thirty-seven others present. A lengthy report was submitted by the Council, approved and recorded, though the record does not quote the terms of the Bye-Laws. The following extract from the Council’s report shows the attitude adopted during the compilation:

They have been careful that the new laws should embody all the principles laid down in the original resolutions and that in the necessary development of them any deviation from their letter or spirit should be scrupulously brought under your notice.

The only deviations which the Council believe to be of any importance are,
1st. The distinguishing those Associates who are principal Officers of Life Assurance Companies by the title of Official Associates.

2nd. The authorizing a ballot to be taken upon the recommendation of the Council for the admission as a Fellow of any person who although not an Actuary may be eminent for the attainments which constitute one and

3rd. The appointment of four instead of three examiners, the fourth to be an Official Associate or Honorary Member.

These changes are believed to be expedient and desirable and are submitted accordingly for your approval.

The form adopted is shown in a green paper-covered pamphlet of which the earliest example in the Library of the Institute is marked '1849' in ink. It is entitled *Constitution and Laws of the Institute of Actuaries of Great Britain and Ireland, No. 12 Chatham Place, Blackfriars*. One hundred prints were bought originally, doubtless in preparation for the confirmatory meeting, and 400 more were ordered on 8 March 1849 to be obtained from Messrs Jones and Causton.

The Council took the agreed Scheme with its 29 Clauses and amplified and rearranged it into the 'Constitution and Laws' of 47 Articles. The various Sections with their titles were:

<i>Section</i>	<i>Articles</i>	<i>Title</i>
I	1-3	The Objects of the Institute and its Constitution
II	4-16	Of the Members of the Institute and the Manner of their Election and Disqualification
III	17-20	Of the Payments of Contributing Members
IV	21-25	Of the Annual General Meeting and Election of Council and Officers
V	26-33	Powers and Duties of the Council
VI	34-39	Duties of the Officers
VII	40-41	Examinations for Certificates of Competency
VIII	42-47	Ordinary and Special Meetings

The text shows clear evidence of careful production, though there are occasional ambiguities, e.g. the definition of 'Official Associates' as Associates who are or may become Principal Officers. Full reproduction is impracticable, but brief quotations and comments follow:

(1) Article 1 shows how the main objects set forth in Clause 2 of the original Scheme were cast into shape and indicates a much stronger primary emphasis on science than on practice:

'The Institute of Actuaries of Great Britain and Ireland is an Association founded for the purpose of elevating the attainments and status, and promoting the general efficiency of all who are engaged in occupations connected with the pursuits of an Actuary; and for the extension and improvement of the data and methods of the science which has its origin in the application of the doctrine of probabilities to the affairs of life, and from which Life Assurance, Annuity, Reversionary Interest and other analogous Institutions derive their principles of operation. It embraces as

Modification of the First Bye-Laws

its peculiar province of inquiry, all monetary questions involving a consideration of the separate or combined effects of Interest and Probability.'

(ii) The admission of every Associate and Fellow was to be 'in manner and form following: The President of the meeting, taking him by the hand, shall say, "A.B., By the authority and in the name of the Institute of Actuaries of Great Britain and Ireland, I do hereby admit you an Associate (Official Associate or Fellow) thereof"'. .

Before admission, each candidate 'having first paid his subscription for the current year, or a composition in lieu thereof', had to sign 'the Obligation Book' to the effect that he would further the good and promote the objects of the Institute, attend its meetings as often as conveniently possible and obey its rules. Release could be obtained on written notice of withdrawal, provided that all arrears were paid and all books, papers or other property of the Institute delivered up.

(iii) Corresponding Members (persons resident out of the United Kingdom) could be elected.

(iv) Expulsion by a three-fourths vote at an Ordinary Meeting of the Institute was decreed in the event of 'improper conduct' considered by the Council to mean that continuance of membership 'would be discreditable to the Institute'.

(v) Each Fellow was to pay an annual subscription of 3 guineas (or a composition of 30 guineas) and each Associate, 2 guineas per annum (or a composition of 15 guineas). But an Associate who had 'compounded' and thereafter became a Fellow was liable either for 2 guineas per annum or for a further lump sum of 15 guineas.

(vi) There were to be three Trustees, not necessarily Members, in whose names the funds of the Institute should be invested.

(vii) The Council was to manage the funds but not at any time to 'contract engagements exceeding the amount which would remain after satisfying all debts and liabilities'. Presumably no difficulty was apprehended as regards valuations.

(viii) Of the four Examiners, two were to be Fellows and the others an Official Associate and an Honorary Member or 'in lieu of the last' a third Fellow. [This provision is not the same as that mentioned by the Council in its Report.]

The Constitution and Laws were modified somewhat, but not substantially, from time to time during these early years. There is evidence of a desire to avoid the taint of indiscriminate admission of new members and to prevent capricious change: in March 1851, it

was resolved that no extraordinary vote of money 'or for altering any of the existing Regulations of the Institute' should be entertained unless due notice had been given previously and the proposal were moved for adoption, at the time stated, by the member who had given the notice.

Mr F. C. Spenser of Halifax having written to suggest the advantage of 'obtaining Her Majesty's permission to denominate the Society "The Royal Institute of Actuaries of Great Britain and Ireland"', the Council decided in February 1849 that his letter 'be acknowledged with thanks'. It is evident that the Council did not feel the time to be ripe for such an approach, especially seeing that the profession had not been able to organize itself into one Body. Probably for the same reason, no official notice appears to have been taken by the Council of the 'Bill for regulating the Profession and Practice of Actuaries throughout Great Britain and Ireland' of which the text appears in *J.I.A.* 1, 115-21 (the first Number). This Bill was introduced with an article pointing out that the mere establishment of the Institute was not enough, that its permanence must be secured and its influence widened. The writer said 'we have, with the kind assistance of legal friends, endeavoured to lay down the general outlines of a Bill'. The plan that the Bill was intended to carry into effect was one for a Register of Actuaries, entry on which was to be an essential condition of engaging in actuarial practice. The Institute was to be incorporated as the Governing Body of the Profession. The writer recorded (*J.I.A.* 1, 264) his regret that no material advance had been made 'towards the accomplishment of the objects contemplated by this Bill'. It had been found that, to have any chance of success, the Bill must 'either originate with the Government, or at least have their concurrence, obtained through the medium of the Board of Trade or other customary channel'. And then he came to the crux—'nothing short of great unanimity, energy and perseverance on the part of the whole profession, is likely to achieve the accomplishment of this most desirable end'. But there was not great unanimity and could not be while the Actuaries' Club remained firmly aloof. The following extract from the Minutes of the Club shows its attitude:

2nd November 1850: At a Dinner at the Albion Tavern, 11 members being present, 'Mr Ansell submitted several letters he had received from

Opposition of the Actuaries' Club

Mr Finlay of Edinburgh suggesting that the Club should merge into the Institute of Actuaries with a view of forming from the united bodies some Association or Committee which should discuss and regulate matters of practice in regard to life assurance. The opinion of the members of the Club having been expressed individually and the opinions being unanimously against the adoption of Mr Finlay's suggestions, it was resolved that Messrs S. Ingall, Ansell, Rainbow and Wm. Downes do form a Committee to embody the opinions of the Club in the form of a reply to Mr Finlay's letter and to forward such reply to him'.

In March 1854 a member of the Club referred (in a letter to a Member of Parliament, who had sought views on Decimal Coinage) to

myself and several other Actuaries who form an Association for the consideration of matters relating to the theory and practice of Life Assurance.

COUNCIL PROCEDURE AND GENERAL GOVERNMENT

W. M. Browne of the 'Westminster' allowed to the Council the use of a room at the Office in King Street, Covent Garden. Meetings were held also at the 'Minerva' Office in King William Street and at the never-failing 'Guardian' Office, to the Messengers of which a sum not exceeding £5 was voted on 25 October 1848, to be distributed by Cleghorn. Early in April 1849, the Messengers of the 'Westminster' and of the 'Minerva' received 'a donation of one guinea'. It is not clear whether there was more than one functionary at either of the Offices.

As Registrar, J. J. Cleghorn had an anomalous position; he was not actually a Member of Council. The status of the Registrar was considered while the Institute was being established and contradictory decisions had been made. The subject continued to give rise to doubt for, on 20 November 1848, it was decided to recommend 'at the next General Meeting that Mr Cleghorn as Registrar be a Member of the Council for the ensuing year'. Meanwhile, he came on to the Council in the place of Le Cappelain, who resigned *nem. con.* on 19 December. Nevertheless, on 11 January 1849, 'Mr Jellicoe and Mr Cleghorn were requested to see whether Mr Cleghorn can consistently with the Rules act as Registrar, he now being a Member of the Council'. They reported a fortnight later 'that the election of the

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Registrar to a seat at the Council Board was not strictly consistent with the 23rd and 25th Articles of the Constitution, but recommended that the matter be suffered to remain in statu quo until the next Annual General Meeting when steps could be taken to adjust it'. Cleghorn died in 1851, still in possession of the title of Registrar, and so ended a short but very active Institute career that had begun when Elijah, in the person of Griffith Davies, translated himself to Wales for a season but conveyed his mantle irrevocably to an indefatigable Elisha.

The first Treasurer, F. G. P. Neison, resigned on the same date as Le Cappelain, but two of the Vice-Presidents (Hardy and Sylvester) were deputed to see him on the subject. Hardy reported on 28 December 1848 that 'Mr Sylvester and himself had endeavoured to obtain a personal interview with Mr Neison, but had not been so fortunate as to succeed; Mr Neison having left London for Scotland without giving any answer to a letter written by Mr Sylvester apprizing him of their intention to call and the object of the proposed visit'. Hardy may have remembered his own action if (as a quotation already made from Higham shows) he was absent purposely from a meeting of the Committee of ten called to consider his promised scheme for a College of Actuaries. These pioneers were forthright in discussion and controversy, but they knew also the associated value of absence and did not hesitate to secure a good offing from a professional lee shore.

Neison 'went off' in a dual sense, but he came back to the Council and, in 1853, gave more trouble. This led to directly punitive action. On 3 January 1853, a Special Meeting of the Council resolved:

That the Council view with surprise and regret the proceedings of Mr Neison on the occasion of the Ballot for Mr Newmarch: that by his opposition out of the Council to a measure agreed to by a majority in it, and understood to be a Council question, he has destroyed all hope of harmonious co-operation with him in the affairs of the Institute: that he be informed that such is the case, and that the resignation of his seat will be accepted.

Neison replied promptly and succinctly:

Will you oblige me by removing my name from the list of the Members of the Institute.

Trouble with Two Individual Members

A Special General Meeting of the Institute was requisitioned and held on 7 March 1853, when it was moved and seconded:

That this Meeting having heard the explanations of the Council with respect to the retirement of Mr Neison from this Institute is of opinion that the Gentleman has been improperly called upon to retire, and hereby resolves that the Council be requested to respectfully invite Mr Neison to again become a member and to accept the same Office as he held before his resignation.

An amendment in the following terms was moved and seconded:

That this Meeting is of the opinion that there has been nothing in the conduct of the Council in reference to the retirement of Mr Neison which calls for an expression of their disapprobation.

It was decided to vote by Division and, Tellers having been appointed, 'the Members voting against the amendment retired to the adjoining room'. The amendment was carried, the Tellers not voting, by 71 to 27.

The members of the Council resident in Scotland wrote in support of the Council's attitude to Neison and were thanked 'for their approval of the course pursued'.

The last reference to the incident came in May 1853, when

Mr Jellicoe, V.-P., brought before the Council a letter from Mr Francis G. P. Neison dated 22 *March* 1853, addressed 'To the Chairman of the Institute for the evening' which he received at 7 p.m. on Monday the 25 of April 1853.

and it was resolved:

That this Council highly approve the course pursued by Mr Jellicoe with respect to the letter now produced by him, and that such letter do lie on the table.

Another case of discipline was that of Alexander Colvin ('United Mutual, Mining and General') who obtained the certificate of competency in 1851. On 16 March 1854, he was the subject of the following Report and Resolution:

Mr Hodge reported that at the Anniversary Meeting of the Statistical Society held on the 15th March instant, Mr Colvin had stated that a candidate for the Fellowship of the Statistical Society had been recently

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rejected by Ballot in consequence of a conspiracy among several Members of the Institute of Actuaries. **RESOLVED:** That a Special Meeting of the Council be summoned for Thursday next to consider the conduct of Mr Colvin at the Anniversary Meeting of the Statistical Society as reported by Mr Hodge, and that Mr Colvin be informed thereof with a view to his furnishing any written explanation should he wish to do so.

Colvin having replied, the Council considered him further, and resolved on 6 April 1854:

That it appears to the Council that at the Anniversary Meeting of the Statistical Society, held on the 15th ultimo, Mr Alexander Colvin, an Associate of the Institute, publicly stated that a candidate for the Fellowship of the Statistical Society had been recently rejected by ballot in consequence of a conspiracy among several members of the Institute of Actuaries.

That Mr Colvin has refused to furnish the Council with any explanation or evidence as to the abovementioned charge, or to specify the persons to whom he referred, although twice specially applied to, and although ample opportunity has been given him for that purpose.

That the Council are deeply impressed with the conviction that it would be wholly subversive of the character and utility of the Institute if imputations upon its members of such a kind were allowed to pass unnoticed. And as it appears to them that Mr Colvin's conduct has been injurious to the Institute, and unbecoming a member of it, they are of opinion that his remaining one will be discreditable to the whole body.

That this decision be reported to the next Ordinary Meeting with a view to a ballot being taken at the then following one for Mr Colvin's expulsion under Rule 16 of the Constitution and Laws.

That a copy of the foregoing resolution be transmitted to Mr Colvin.

This Minute was read at the Ordinary Meeting of the Institute on 24 April, when an unsuccessful effort was made to have a Select Committee of five appointed. Eventually, at the next Ordinary Meeting on 29 May 1854, the correspondence was read, including a letter from Edward Cheshire, Assistant Secretary, refuting Colvin's charges against him, and Colvin was expelled by 80 votes to 25. Meanwhile, on 24 May, he had issued a circular, from 54, Charing Cross, to the members of the Institute. He said that the trouble arose because four Secretaries or Actuaries of modern Life Offices were to be put up for election at the Statistical Society, with which the

Mr Colvin's Allegations

Institute shared accommodation in St James's Square. Three of them were blackballed and the fourth name was withheld from a vote by the Assistant Secretary, Edward Cheshire (who acted as such for both Bodies) because 'he knew that it would be blackballed' also. After suggesting that the conspiratorial Actuaries took advantage of the benevolent slackness of the Statistical Society's procedure—'such was the harmony of the Statistical Society that balloting for new members was purely formal, only a few members being even offered the box', the collector merely got a few more than the minimum of votes—Colvin referred to plotters who overlook the practical certainty that someone will give them away and alleged that one of those concerned had admitted that five members of the Council of the Institute went to the Statistical Society's meeting 'purposely to blackball every Manager of a modern Life Office'. He ended with a strong appeal to members of the Institute to vindicate him, since each of them might become a victim of the Council's 'undue stretch of power'.

This incident is thought worthy of record at some length, not merely because of its historic interest but also, and chiefly, because it suggests certain wider references. First, there is the question whether it contributed at all to the increase of the tension between the Scottish members of the Institute and the Council in London that led in the following year to the great secession. The name of the accused and the fact that the copy of his circular is in the Library of the Faculty tend, perhaps, to support such a view, but the name may mean nothing in this context and the preservation in Scotland and not in England of a circular apparently issued to all members is explicable on other grounds. Moreover, Colvin's name is not in the first list of members of the Faculty of Actuaries; there is no trace of any effort on his behalf by the compact body of Scottish members of the Institute who, at the material time, had specific representation on the Council in London and no allusion to Colvin's case is seen in the current lengthy correspondence between Scotland and England. Secondly, and of this there can be much less doubt, the incident suggests that there was serious concern on the part of the Institute at the upspringing of weak Life Offices, whose administrators were thought to be trying to obtain the cachet of membership of the Statistical Society in misleading substitution for the Fellowship of the Institute that was beyond their reach.

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The Council met very frequently in the earlier years but later, it was able, naturally, to lengthen the stroke. The President, doubtless because of his poor health, was by no means always present. He was requested at an early stage to give an Address at very short notice and informed the Council that he would do so later in the Session. Nevertheless, soon afterwards, the Council made another virtually instant demand.

On two occasions the Council meeting had to be postponed because of the lack of a quorum. The question of retirements from the Council arose in May 1849, when it was proposed by Hillman of the 'Star' that 'the English members who shall be found to have attended the fewest meetings be left out in the list to be submitted to the General Meeting'. The number of attendances was ascertained and Hillman was one of the four who, so, would retire. The Council, perhaps from a feeling of delicacy, adjourned the decision, but Hillman 'went off' that year. He came back, but evidently was not fixed in the conciliar heavens for, in 1851 again, he was due to and did retire. The current practice of requiring a year to elapse before rejoining was made a part of the Constitution and Laws from the beginning.

The Council was increased in 1852 to a total of twenty-two members, including the President and other Officers. The position of Registrar was abolished. Five members were to retire each year—a Vice-President, three Town Fellows and a Country Fellow.

The preparation of the *Annual Report* was entrusted variously to the Secretaries, the Editor of the *Journal* and, occasionally, the President.

The first Committees, appointed in February 1849, were 'Legal and Parliamentary', 'Mathematical' and 'Commercial'. Power was given to each to add three to its number from the Fellows and Associates; the two Honorary Secretaries began the long march of their kind by being made *ex officio* members of all Committees. In October 1849, a Statistical Committee was added and the names of all Committees and of their members were ordered to be 'placed prominently in the Council Room'.

Chatham Place, Blackfriars

PREMISES AND STAFF

On 30 November 1848, after a suggestion had been withdrawn that accommodation for Monthly and Council Meetings be sought at the rooms of the Statistical Society 'for a period of twelve months at a sum not exceeding 50 guineas', the Vice-Presidents were asked to consider the question of premises. The view of the Council is shown by its report to the General Meeting of 6 January 1849, as follows:

The Members of the Institute have already had occasion to express their thanks for the frequent accommodation afforded them at the 'Guardian' Office.

The Council have now to reiterate those thanks and also to acknowledge the kindness of Mr William Meredith Browne in allowing them to hold their Meetings at his Office and in tendering the use of a capacious Board Room for the ordinary Meetings of the Institute—till other accommodation be provided the Council would recommend that his obliging offer be accepted and that the ordinary Meetings for the session be held there on the 29th January, the 26th February, the 26th March, the 30th April, the 28th May and the 25th June at such hours as may be hereafter determined.

Having provided for the ordinary Meetings, the Council would beg leave to suggest that at present it would not be desirable to incur any considerable expence for additional accommodation. They conceive that the occupation of a Room in a convenient part of the City and the engagement of a Clerk to be constantly employed in collecting and registering such information as may be useful to the Members will afford all the aid which the Institute at its present stage is likely to require and nothing will be more easy than to supply more extended or urgent demands should they arise.

On 11 January 1849, it was resolved:

That the offer of the Family Endowment Society to let the Second Floor, Upper part and Basement of their house, with the use of the First Floor after 4 o'clock in the afternoon at an Annual Rental of £75, be accepted, the tenancy being determinable at 3 months' notice on either side.

The premises were at 12, Chatham Place, Blackfriars, and it was decided to appoint a clerk at a salary of £60 p.a.; his hours of

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attendance were 'proposed to be from 12 o'clock until 8'. A week later, steps were taken to secure a Messenger:

Resolved that a Messenger be appointed for the Institute whose wife shall reside with him on the premises and clean the rooms, that he be allowed to devote a portion of his time to the service of the Family Endowment Society and that the remuneration to be allowed him by the Institute do not exceed ten shillings per week with residence in the house.

On 1 February, three applicants for the post of Clerk were 'admitted candidates' and 'requested to attend' the next meeting. Also, five potential Messengers were recognized as such and 'required to attend' that meeting. Accordingly, Mr William Clark was appointed Clerk and E. T. Holden, Messenger, 'provided that the Directors of the Family Endowment Society do not object to children being resident on the premises and if they do so object, then that F. W. Loveday be appointed the Messenger, he being a single man'.

Some secondhand furniture already on the premises was bought for 30 guineas, on the valuation of 'Myers of Cannon Street'. The equipment included a horsehair sofa, four Britannia metal candlesticks and a ladder for fire escape. Additional equipment was provided, e.g.:

	£	s.	d.
2 very strong deal tables with trussels altered to instructions	3	0	0
Green Cloth covers for ditto	2	2	0
Deal top loo table 4 ft. 6 in. diameter, mahogany stand	5	5	0
Desk for clerk	2	10	0

By 5 April 1849, the Council was able to order an advertisement to be inserted in the papers acquainting the members that their rooms were now open. And, lest any should be in danger of forgetting the rock from which he was hewn, it was decided that 'the Prospectuses, Reports, Policies and Forms of every description used by Assurance Offices be obtained for the Institute'. In November 1850, the Clerk was instructed to obtain Prospectuses, Reports, etc. of the Life Offices in January each year and to keep them available for ready reference by members.

The Clerk was allowed to 'reside in the apartments at Chatham Place' during the pleasure of the Council and his personal boundaries were delimited by the placing of the whole of the third floor at his disposal.

Early Domestic Difficulties

Relations with the landlords were not amicable for long since, at the end of only three months, a dispute arose concerning the proper proportion of the Messenger's wages to be paid by them. The arrangement was verbal and the Council's understanding of it was contested, but the Council 'upon referring to the Members who were present at the time' felt itself 'under the necessity of requesting that the balance due from the Family Endowment Society be paid without any further delay'. Eventually, the matter was compromised and the Institute was left to pay 11s. 6d. a week (out of a total of 1 guinea): the Society's share, however, was brought up from 7s. 6d. to 9s. 6d. Almost simultaneously, the Council ordered the discontinuance of the taking of the *Daily News*, *Standard*, *Literary Gazette* and *Blackwood*.

In October 1849 there was a bill of £5. 4s. from Charrington and Company for 4 tons of coal.

Before the close of 1849, the Clerk received an appointment with the 'Consolidated', but expressed a wish to 'retain his present situation of Clerk to the Institute'. He was allowed to do so 'for the present' and was given a grant of ten guineas 'for his past service'. Early in 1850, the Council delivered notice to determine its tenancy at Chatham Place at Midsummer.

In March 1850, the Clerk resigned. He died very soon, and, in November 1850, his widow appealed to the Council 'for relief', which was refused on the ground 'that no funds existed for the purpose'. Edward Cheshire was appointed to the vacant post and the general situation remained quiet until July when Holden, the Messenger, was given a month's notice and the Council decided to remain 'for 12 months certain' with the Family Endowment Society. The landlords had promised 'to put the premises in a complete state of repair' and offered, 'if the Institute would bear one-half of the cost, to open a communication between the Rooms on the first floor by large folding doors'. The Council undertook to pay £10 for this facility.

In October, a new Messenger was appointed at 10s. a week and was granted 'the privilege to supply the members with Tea or Coffee on other evenings than the Sessional Meetings, subject to the superintendence of the Secretaries'. A subsequent Minute records, under the title 'Tea and Coffee', a decision that 'Brown and Ellis of

28, Ludgate St., may supply the necessary refreshments at a charge of 1s. per head on all who enter the Refreshment Room', but this may refer to free provision of refreshments to members attending the Sessional Meetings and not to the franchise of the Messenger. It was resolved also that 'Members be allowed the amusement of playing games at Draughts or Chess—no pecuniary stakes to be played for'. David Jones presented some boards and sets of pieces.

The Messenger's wages were increased in February 1854 from £35 to £40 a year 'to include the delivery of the *Journal*'.

Edward Cheshire was made Assistant Secretary, the first to hold the familiar title, on 26 December 1850; his salary was raised to £70 a year; he was given a donation of ten guineas and granted—a *non sequitur*, one trusts—leave of absence for a week.

He became an Associate of the Institute and served it with distinction for rather more than 5 years. The increasing, though by modern standards the belated, confidence felt in him is shown by the Minute of 4 November 1852 resolving 'that the Assistant Secretary shall attend the Council and Committees, to take Minutes, when requested'. His salary was increased to £100 per annum from 1 January 1853 and on one occasion he was given 6 weeks' leave of absence in the Summer. His career ended on the secession of the Scottish Members; perhaps but for this untoward event, which led the Council very closely to review the position of the Institute, Cheshire would have remained and have become at least a pale forecast of a famous successor. The Committee appointed on 24 May 1855 (when the break with Scotland occurred) made the following reference:

Neither can the salaries be lessened unless the Council thinks proper to avail itself of an offer made by the Assistant Secretary which your Committee refer to with much satisfaction as affording another instance of that gentleman's zeal for the welfare of the Institute.

The Committee's report was considered and adopted on 31 May 1855—only one week after the decision to investigate—and at the same meeting a letter was read 'from the Assistant Secretary tendering his resignation on the ground that the state of the Institute was such as to render it necessary to reconsider every item of expenditure'. It was resolved 'that Mr Cheshire's resignation be accepted with deep

regret on the part of the Council at the impending loss of his services'—he resigned his Associateship in October 1858. In July 1855, a new Assistant Secretary (Scargill) at £100 a year and a Clerk at £50 a year, were appointed in consultation with the Statistical Society, the Institute paying 40% of the cost.

Meanwhile, the Council was set upon a removal to fresh premises. At the end of April 1852, inquiry was made of the Statistical Society about the admission of the Institute 'to a participation in their Rooms'. A small Committee was appointed, with full power to arrange with the Statistical Society for the Institute to become tenants of the Rooms in No. 12, St James's Square and notice was given to vacate Chatham Place at Michaelmas. The Messenger received similar warning, probably because the Institute would be sharing the services of the Society's Messenger, and on 1 July the Council accepted the Statistical Society's terms for a tenancy thus:

The Council of the Statistical Society of London consent, in the terms and spirit of their Council Minute of the 12th of June instant to allow the Institute of Actuaries the use of their Rooms for their General and Ordinary Meetings not exceeding 12 in the year, and for such Council Meetings as the Institute may desire, provided they do not interfere with the Meetings of the Statistical Society, or with the Meetings of their Council, and take place after four o'clock p.m.

The Institute to pay £75 per annum for such uses, and to pay half the wages of the Messenger and Charwoman, to commence from the 29th day of September next.

The Council of the Statistical Society to give reasonable accommodation for the Books and Papers of the Institute of Actuaries.

The Rooms of the Statistical Society to be accessible to the Members of the Institute of Actuaries daily, on the same footing as to the Fellows of the Statistical Society.

The Agreement to be terminable after one quarter's notice from either party.

Despite these pre-occupations, the Council found time to order 'that the *Evening Journal* be discontinued'—a long prevision, perhaps, of the need of guarding against the temptation (to which a distinguished member succumbed some years ago) of reading an evening newspaper at the Council Table during a meeting.

Finally, on 22 July 1852, the members were ordered to be informed

that the rooms in Chatham Place would be closed during August and September and that the new premises in St James's Square would be available on 1 October.

MEETINGS, MEMBERS AND MISCELLANEOUS MATTERS

In December 1848, Sessional Meetings were arranged to be held on the last Monday of every month beginning with 29 January 'for the current year' and, at a meeting in June 1849, it was agreed, subject to the absent President's approval, that 'after the next Sessional Meeting, the Chair be taken by the President at seven o'clock precisely and vacated at nine o'clock precisely'. 'Half-past' has been deleted from both times—the rule about closing would have been most welcome to harassed Secretaries of friendly Dining Clubs had they existed in those early days. The 'scope of the profession' was borne in mind by a decision of November 1849 to advertise Sessional Meetings in *The Times* and *The Chronicle*. The accounts of these Meetings show that a rich variety of Papers was presented, but control was exercised, each offered contribution being remitted to one of the Committees for consideration before being accepted. For some time, a second scrutiny was imposed before Papers read were passed for printing. On at least one occasion, a Paper was not approved and was ordered to be returned to its author. A Lecture accepted in December 1849 from Charles Jellicoe, on 'The Philosophy of Account-keeping', was ordered to be announced by circular to the members and 'by one advertisement in *The Times*'.

A suggestion was made in April 1851 that the members should 'assemble occasionally for the purpose of discussion', apparently without having a formal Paper as a basis, but the motion was lost.

In December 1851, Mr W. S. Gover requested 'the sanction of the Council to the formation of a Class for mutual instruction'—a faint foreshadowing, perhaps, of the Students' Society. The Council resolved that it would 'willingly accede to the proposition... so far as related to the use of the Rooms of the Institute' but was 'of opinion that any circulars or letters issued in reference to the proposed Meetings should not bear an official character'.

Special attention was paid to the form of the Certificate of Competency. This diploma was required in terms of the last Clause of the first scheme of Examinations, approved in July 1849; the Examiners

The first Prizes

produced the Certificate in draft, which was printed and circulated but not passed until October 1850. In December 1851, it was decided to charge 5 guineas 'to each Candidate for Examination, on obtaining a Certificate of Competency'.

The earliest reference to Institute Prizes occurs in February 1850 when W. T. Thomson offered three prizes 'to be awarded by the Council for the best explanation of his large Students' Table Carlisle 3%'. The Council was 'gratified to observe the interest taken by Mr Thomson in the matter' (after all, it was his book) but was 'quite willing that he should offer the proposed prizes' and nominate 'the individual parties to award them'. Clearly, the Council did not wish to become involved in any argument between an aspiring interpreter and the distinguished author.

The first President, John Finlaison, tried to resign in May 1851 on account of ill health, but he was persuaded to remain in Office, the hope being expressed that his health 'will yet be re-established'. He died, still President, in April 1860.

It is pleasant to see in the Minutes votes of appreciation for those who had worked for the Institute with special fervour and distinction. In July 1852, Charles Jellicoe received 'cordial thanks' for 'his unwearied exertions in the service of the Institute', and Robert Tucker was thanked 'for his unremitting attention to the duties of Honorary Secretary'.

At times, the Council regarded itself, doubtless conveniently, as being bound firmly by precedent—in December 1853, an applicant was informed 'that the present Council have no power to rescind a resolution passed by a previous Council'. Sometimes a little latitude was allowed—in May 1855, an Associate who offered his belated subscription of 1 guinea, on the excuse that he had been absent from his Office for several months because of illness, was allowed to pay 'with the understanding that the case be not drawn into a precedent for the future'.

There is a hint, as early as October 1849, of a problem that since has become endemic: a Notice of Motion was set down 'that the Council do hereby agree severally to prepare a paper for publication'. It may have been with this in mind that, in January 1853, a letter from a Mr Smith on the subject of 'Self-Supporting Dispensaries' was 'answered in the negative'.

The influence of the Institute was extended and some public recognition secured by the election as Honorary Members of G. R. Porter of the Board of Trade, Sir John Lubbock, Dr Farr, Professor De Morgan and Lord Overstone. Wisely, their number was limited.

The first Dinner, after an Annual General Meeting, took place at the Castle Hotel, Richmond (Surrey) and led to bills of £75. 1s. for the Dinner itself and of £12. 12s. for the Singers. In 1851, a more ambitious function was held, also at Richmond, when the Institute entertained the English and Foreign Representatives of Assurance Interests. Lord Overstone, President of the Statistical Society, was in the Chair and, in proposing the toast of the evening, 'The Institute of Actuaries', he spoke of it as being 'supported by the exertions of a body of individuals who applied their time and their high intelligence to what he could not but consider was the appropriate, and he would even go so far as to say, was the appointed duty and mission of man upon earth'. The speeches are reported in *J.I.A.* 1, 379-88. The actual arrangements are made clear by the resolution of the Council on 5 June 1851 that:

The number of Guests, home and foreign, be limited to forty; the contract price for the dinner be limited to 25s. per head to include every possible expense; the tickets be 25s. each, and that the deficiency be provided for by those who may volunteer to act as stewards.

In July, the Council, having authorized the expenditure of £22. 18s. 4d. 'for Newspapers containing the Report of the Dinner', gave warm thanks and expressed 'its perfect satisfaction' to Charles Jellicoe, J. Hill Williams and S. Brown 'for the zeal, talent and assiduity with which they conducted the arrangements'. Each of them became President later.

The meeting and festivity led to the election of a long list of Corresponding Members of the Institute.

Finance did not play a very prominent part in the early days. J. J. Cleghorn, who had received the first subscriptions, 'delivered in a draft' for £326. 6s. 8d. on 15 December 1848, but he was not directed to hand it to the Treasurer (John Laurence) until 11 January 1849. Nevertheless, a Banking Account had been ordered on 20 November 1848 to be opened 'at the Banking house of Sir John Lubbock and Co., or at the Bank of England, or at a Joint Stock

Members' Subscriptions

Bank in the name of the Treasurer, in which account he shall be designated as "Treasurer of the Institute of Actuaries". The account, in fact, was placed with the Bank of England but, after a few years, it was transferred to the London and Westminster Bank and remains with that Institution under its present name.

Control was exercised by the Council, without a Finance Committee. In May 1850, the Auditors sent a letter 'in reference to one of the items in the account which the Secretary was requested to explain'—no details are given. There were, however, two Committees appointed to consider the financial prospects of the Institute, particularly in relation to subscriptions. In October 1849, the scale was fixed thus:

	£	s.	d.	
Fellows, Town	3	3	0	p.a.
„ Country	1	11	6	„
Official Associates, Town	2	2	0	„
„ Country	1	1	0	„
Associates, Town	1	1	0	„
„ Country	10	6	„	

and the Committee thought 'it proper to add that assuming the number of Members will not be increased, the future income of the Society will be £385. 17s. 6d., which the Committee believe to be quite sufficient for the present purposes of the Institute'.

In June 1853, another Committee's report led to the recommendation to the Annual General Meeting of various changes including the following:

The Annual subscription for Members residing beyond twenty miles of London shall be as follows, viz.:

Fellows	Two guineas
Official Associates	One guinea
Associates	One guinea

A suggestion by the Committee that Members of Council should pay 5 guineas per annum was not put forward to the Annual Meeting.

These terms remained in force only until 1855, when, as is recorded below, the Scottish secession caused further changes. In May 1854, the significantly large number of twenty-six members was ordered to be omitted from the list as defaulters.

EXTERNAL RELATIONS

It was resolved in 1853 'that the List of Parliamentary Papers be purchased as often as published'. A considerable amount of work was done by the Committees on the Assignability of Policies of Life Assurance, Legislation regarding Life Assurance Offices, Friendly Societies and Joint Stock Companies generally, Decimal Coinage and a proposed Duty on Successions. Attention was concentrated on the special privileges enjoyed by a few Offices, including the National Provident Institution concerning which some members of the Institute were in correspondence with the Chancellor of the Exchequer and Lord Campbell. The questions involved are treated in some detail in Hazell's *Record of the First Hundred Years of The National Provident Institution* (pp. 21-31) and the full correspondence, with various newspaper comments and much other matter, can be read in a pamphlet (*Correspondence with the National Provident Institution...*) in the Library of the Institute. Clearly, the unprivileged Offices were much exercised, and this and other matters of interest gave to the Actuaries' Club and the Institute opportunities of working upon parallel lines which, if relativity could be defied, should never meet. In March 1849, the Club considered a proposal to frame a petition to the House of Commons, on the subject of the privileged Offices, 'to be submitted to Assurance Offices generally for signature'. During April, the Parliamentary Committee reported to the Council that a petition to the House of Commons was afoot 'against the exclusive privileges enjoyed by six or seven Offices enrolled under the Friendly Societies Acts' and the Council resolved to go higher by petitioning 'the House of Lords on the same subject'. A week later, the plan had to be dropped because it had been found to involve 'in the prayer the consideration of a Money Bill'. Both Club and Institute decided to collect information on Foreign Risks. The Club was first in the field and dealt with the extra premiums charged; the Institute came later with an investigation into the rates of mortality arising from the risks. The decision, in November 1850, to undertake this work is linked in the Minutes of Council with a refusal to adopt, for the time being, a Scottish suggestion that the general mortality experience of Life Offices should be collected (see p. 67).

An inquiry was begun in November 1849 of which, according to

Cholera, Reassurances and Medical Fees

the circular issued to the Offices, the primary object was 'to ascertain the effect of Cholera upon Assured Lives and its pressure upon particular ages'. The forms to be prepared appear to have been almost as fearsome as the disease itself and there is no record that any Office ever filled them up. But Cholera was an awful problem, as the following extract from a review (*J.I.A.* VI, 110) shows:

To quote from the Report now before us, 'the City of London possesses no public baths, no public laundries, no model dwellings. These institutions, which in their relation to the poor are beyond most things reformatory and educational, and which seem in a peculiar manner to claim support from the wealth and authority of your great municipal government, have hitherto not made a beginning within the City.'

Perhaps it was with the hope of restoring confidence that the Commercial Committee, in January 1850, was requested 'to prepare a form of agreement for reassurances'. A month later, the indefatigable Mr Finlay was reported to have sent a letter 'enclosing fifty copies of the Agreement entered into by the Scotch Offices for regulating reassurances'.

In the same year, prolonged consideration was given to the subject of Medical Fees, concerning which there may have been less fear of Scottish anticipation. But trouble came from within, for Charles Jellicoe (later President) expressed strong objection to the draft report produced by the Statistical Committee and submitted a draft of his own. Eventually, the Council decided, *inter alia*, to inform the Members at the next Sessional Meeting that it found the matter 'surrounded with difficulty' and that

the question involves a point of practice the determination of which must of necessity be left to the Life Offices separately.

That it does not strictly come within the province of the Institute to advise upon such matters, and consequently the Council do not deem it expedient to recommend any plan for general adoption.

In making this announcement, the Council are far from wishing to convey the impression that questions of this nature should not be discussed at the Sessional Meetings of the Institute; on the contrary they believe that much good may result from such discussions thro' the free interchange of individual opinions, but as regards the Institute collectively, the Members will see that for the reasons above given and particularly with reference

to the peculiar province of the Institute as defined by the 1st article of its Constitution and Laws, the Council could not consistently arrive at any other conclusion.

In May 1850, the Council received from F. G. P. Neison a letter and plan for the formation of a Life Assurance Protection Association. The matter was declared to be one for the separate consideration of the Offices and not 'within the scope or intention of the Institute'.

It was decided, in June 1853, to make representations to the Government regarding the proposed Duty on Successions and the Minute speaks of 'the ruinous severity with which it will press on the property of Reversionary and Assurance Companies'.

When, in April 1855, the Secretary of the Treasury wished to know what was the feeling in the large Assurance Offices regarding the desirability of legislation concerning them, the matter was considered by the Actuaries' Club, which decided against the Offices' seeking legislation but added that, if Parliament felt legislation to be expedient, proper opportunity should be given for those interested in sound legislation to make suggestions.

In other fields, arrangements were made with some distinguished Home and Overseas Bodies for the receipt, the gift or the exchange of published *Transactions*. The Royal Scottish Society of Arts, The Royal Society of Edinburgh, The Royal Astronomical Society, The Geological Society, the London Institution, *The Bankers' Magazine*, *The Literary Gazette*, The Franklin Institute (of Philadelphia) and The Smithsonian Institution are all so mentioned.

THE SECESSION OF MANY OF THE SCOTTISH MEMBERS

This melancholy event was preceded by, and is explained sufficiently in, the long correspondence of 1853-5 between the Council and the representatives of the Scottish Members, but there are indications of perhaps contributory incidents before 1853. Thus, in February 1850, W. T. Thomson, who had taken a leading part in the foundation of the Institute and was a member of Council, sent a copy of a paper that had been read before the Institute (on the recommendation of the Mathematical Committee) 'with a view to its being printed by the Council'. It was resolved:

The Scottish Secession: preliminary incidents

To express to him the feeling of the Council that there would be an inconvenience in printing a paper which is intended as an explanation of a work which had been so recently published and which might involve the Council in the appearance of expressing an opinion on the merit of the work itself.

Again, the Council (in terms quoted below) rejected, in November 1850, a Scottish suggestion for the collection of the mortality experience of the Offices:

As the experience of the Offices taken some years hence will be so much more valuable than if obtained at the present time it does not seem expedient to make the proposed investigation now, but it being so much more urgent to obtain information as to the rate of mortality amongst persons residing in places abroad or who have at any time incurred foreign risk a Committee be appointed to collect and arrange the requisite data.

These incidents may have had little or no weight and a fervid defender of the English cause might argue that, doubtless, there had been counterbalancing irritations from the North. But when the case is examined as a whole—with a single, yet an English, eye—the conclusion is not to be avoided that fuller sympathy and ampler tact in London would have led to an adjustment of the differences. It is clear, at any rate, that the firm, but courteous, well-knit and patient Scottish letters received replies of a definitely lower and an increasingly poorer type—a difference that Edinburgh sometimes since has believed to be persistent and London has found it difficult always to deny.

This was no case of petty personal unfriendliness or of squalid rancour about trivial points: the cleavage occurred on matters of principle. Such evidence as remains suggests that the relations were good between the Council in London and the leading Scottish actuaries; in the Summer of 1850, the Scottish Managers provided most cordial entertainment at Dinner to the President, Council and their friends and no ripple appears to have been caused by the incredible gaucherie of reporting the function (*J.I.A.* I, 113-14—the first Number) under the heading 'Mental Statistics or Edinburgh in 1850'.

A meeting of Scottish members, who formed more than one-third of the total body of the Institute, decided, in November 1853,

that 'to extend to the Scottish members some of the advantages enjoyed by those resident in London and to secure a continuance of their cordial support', certain changes were 'indispensably necessary':

1. Notice to be given of all important questions brought forward for decision and the right to vote by proxy (through other members).
2. Formation of a Committee in Scotland to conduct there the examination of Scottish candidates.
3. Reconsideration of the recent increase of subscriptions required from 'Non-resident' members, as being inequitable and inexpedient unless a certain proportion of the funds of the Institute should be applied in Scotland for the benefit of members living there.
4. Formation of the Scottish members into a recognized Section with the right to elect annually, from among themselves, one Vice-President and a certain proportion of the Council—such representatives to form a Council of the Institute for Scotland.

A Committee of twelve Scottish members was appointed to conduct the negotiations.

The Council replied in February 1854 that a Committee 'is at this present time in communication with the Government to ascertain how far they would give their sanction to the incorporation of the Institute or to the formation of an incorporated body of Actuaries generally'.

The ambiguous wording covered the fact that the Committee upon the Constitution and Laws appointed by the Council to consider the Scottish Resolutions decided at its first meeting (on 24 November):

That having regard to the concluding paragraph of the 'Report from the Select Committee on Assurance Associations' ordered, by the House of Commons, to be printed, 16 August 1853, this Committee do seek an interview with Mr Wilson, the Chairman of the said Committee, and endeavour to ascertain, from him, under what circumstances any application for the 'formation of an Incorporated Society of Actuaries', as therein alluded to, would be likely to meet with the countenance and support of Government.

No reference is intended, apparently, to the draft Bill, already noticed, 'for regulating the Profession and Practice of Actuaries throughout Great Britain and Ireland'. The reply, moreover, mentions a Charter, the grant of which would involve 'alterations and modifications in the Laws and Constitution'. As regards the Scottish points,

The Scottish Secession: some conciliation

the Council accepted the first in part and met the second to the extent of agreeing that 'the third and final examination for certificates of competency of candidates resident in Scotland may take place in Edinburgh, but that in order to secure uniformity the plan of examination shall be agreed on by the Council in London'. The fourth was covered substantially, perhaps, by the promise to include each year in the ballot-list of recommended Council members, six qualified Fellows suggested by the Scottish members, one of the six to be a Vice-President. Nothing was said about the third point.

In April, a report was received from Scotland of two General Meetings held in November 1853 and February 1854: the first was the one already mentioned, the second received the observations of the Scottish Committee on the Council's reply. The Committee recognized that the Council was prepared to meet the Scottish views 'in certain important particulars' and added, apparently in error, 'Candidates from Scotland for admission as Fellows will pass the whole of their examinations in Edinburgh'. The outstanding points were summarized as being:

1. Recognition of a separate Scottish Section.
2. Application of a part of the Funds of the Institute for promoting its objects in Scotland.

The Committee advised that the first matter should not be pressed: the new scheme secured at least one Annual Meeting of Scottish Members (to select the nominees for the Council) and thus an organization would begin that could be, and would the better be, developed by the Scottish members themselves. The second matter also should be left in abeyance, the Council having given assurances that the revenue of the Institute was not sufficient to cover a reduction of subscriptions or the setting aside of a grant for use in Scotland. Moreover, the payment required from a Scottish Fellow or Official Associate was lower than that for a similar member in London.

Various suggestions were made at the General Meeting, including (perhaps as a veiled hint to the Scottish Offices) the raising of a Scottish Fund 'without requiring an increased contribution from the individual members'.

The subject was remitted to the original Committee to see that the concessions foreshadowed were carried into effect and to consider

what steps should be taken to promote the efficiency of the Institute in Scotland and how the necessary funds could be obtained.

The next, and apparently unrelated but very pertinent, occurrence was the attempted resignation, in April 1854, of E. J. Farren from his position as a Vice-President. He said in his letter that there was apparently no need to give any reason 'especially when such resignation is declaredly with regret'. The Council requested him to change his mind and, on learning that he had done so, passed (on 11 May 1854) the following Resolution of which a copy was ordered to be sent to Farren:

Resolved that the Council desire to express the gratification afforded to them by Mr Farren's acquiescence in their wish, and further to record the fact that in first recommending to the General Meeting the election of Mr Farren to the office of a Vice-President, the Council were in no way actuated by the circumstance that he represented any Life Office whatever, but grounded their recommendation solely on his well-known talents and acquirements as an Actuary.

The situation remained quiet, so far as the record shows, until November 1854, when the Scottish Members of Council, through Holmes Ivory (a Vice-President), sent the following letter to the Council:

The Members of Council resident in Scotland not having the advantage of personal communication with their Colleagues in England, are thus to some extent ignorant of their views and opinions as to matters of general and particular interest, which occur from time to time: they trust therefore that their Colleagues will communicate with them on points of importance, which they themselves discuss, and give their Scottish Brethren the benefit of their views and opinions on matters which may occasionally be brought before them.

The Scottish Members consider it highly important if not essential, for the welfare of the Institute, that there should be undivided opinions in the Council, so as to secure harmony in the whole proceedings; and they do not hesitate in accordance with these views now to bring before the Council two matters which have of late been much discussed both in England and Scotland.

The first of these has reference to the circumstances connected with Mr Farren's resignation of the Office of Actuary to the 'Asylum' Office, and his re-election as a Vice-President of the Institute. It is understood

The Scottish Secession: the 'Asylum' and 'Professional' Cases

that Mr Farren has already furnished the Members of the Council in London with full explanations on the subject. These however have not been communicated to the Scottish Members of Council, and as it is observed that that Gentleman points to further personal justification when legitimate occasion serves, the Scottish Members trust that Mr Farren will consider them, as Members of the same Council, proper parties before whom to place the explanations referred to, and they doubt not the English Members will consider it right that he should do so.

The other matter is the Report of the Investigation of the affairs of the Professional Life Assurance Company lately published. That Report has given much dissatisfaction in Scotland, and as it is signed by some prominent Members of the Institute, and in particular by one of the recently appointed Examiners, the Scottish Members request to be informed whether that Report has been brought under the notice of the Council, and if so, whether it be not such as, in their opinion, to call for remark or animadversion.

The Scottish Members regret that their first communication should refer to Gentlemen so closely connected with them in office, but they are sure the Council will give them credit for a sincere wish to elevate the Profession, and strengthen the Society.

In December 1854, the Council replied thus:

We have now to acquaint you that your letter of the 21st ultimo, with the Minute of the Meeting at which you presided that day, has been submitted to the Council of the Institute, the President in the Chair, specially convened to consider that and other matters, and we are instructed to communicate the following as the result of the deliberations thereon.

The Council have ever been anxious that as perfect a unanimity should prevail among the Members as is to be expected among the Members of any deliberative body, and they have always done, and will continue to do, the utmost in their power to promote so desirable an object.

With regard to Mr Farren's re-election as one of the Vice-Presidents of the Institute the Council are not aware that they have anything to communicate beyond the following facts:

In April last, Mr Farren, who had recently left the Asylum Life Assurance Office, tendered his resignation as a Vice-President, and afterwards withdrew it at the request of the Council, who at the time recorded the fact that in originally recommending Mr Farren as a Vice-President, they had not been in any way actuated by the circumstance that he represented any Life Office whatever, but grounded their recommendation solely on his well-known talents and acquirements as an Actuary.

At the Anniversary Meeting in July last Mr Farren was unanimously re-elected a Vice-President, and the Council have the pleasure to add for the satisfaction of their Colleagues in Edinburgh, that they have not had any reason to question the propriety of the unanimous vote of the Members of the Institute assembled in General Meeting.

At the time of his retiring from the 'Asylum' Office, Mr Farren furnished some of his more intimate friends with explanations of the circumstances under which he had resigned the appointment of Actuary to that Company, but no explanation was ever furnished to, or indeed required by, the Council on that subject.

In answer to your enquiry respecting the recent Report of the Investigation of the affairs of the Professional Life Assurance Company, the Council have to state that such Report has not been brought under their consideration, and to add their opinion that by the Rules and Constitution of the Institute, they are entirely precluded from expressing either commendation or censure upon any Life Assurance Company or its official Reports.

According to Walford's *Insurance Cyclopaedia*, the Asylum Foreign and Domestic Life Assurance Company was founded in 1824, one of its promoters being George Farren, father of E. J. Farren. An early prospectus said:

The 'Asylum' Company confines its business to assuring the lives of persons going beyond the limits of Europe—predisposed to hereditary or other constitutional maladies—of delicate health—of peculiarity of form, whether natural or accidental—labouring under mania, melancholia or any kind of chronic disease, unaccompanied with immediate danger—females in a state of pregnancy—persons engaged in unhealthy occupations—and those who from inadequate testimonials, uncertainty of date of birth, or other causes, would be subject to rejection or an exorbitant rate of premium at other Offices.

All profits of the Company went to the shareholders every 5 years or at least as much 'as may not imprudently check the growth of the funds intended to be accumulated for the security of the assured'. By the end of 10 years, the appointment of an actuary had been made discretionary instead of compulsory and the method of estimating the profits was 'short, plausible and utterly fallacious', since the year's payments were deducted from the year's income, three-fifths of the balance being treated as profit. E. J. Farren was appointed in 1837 as 'Mathematical Calculator'. When, in 1854, he attended his first

The Scottish Secession: the widening rift

Board meeting as Actuary and Secretary, he is said to have discovered that the valuations made by him from time to time had been ignored and that the assets in hand, including the capital, amounted only to about one-half of the sum needed. 'Failing to induce the Directors to co-operate with him in the steps he deemed necessary . . . he at once resigned his appointment.'

It is neither possible nor necessary to give here the facts of the 'Professional' case, but whatever they were, the Council's reply was not conciliatory and it led to a strong rejoinder, after one of the Honorary Secretaries, when in Edinburgh, had given some further explanations to Holmes Ivory.

On 12 December, the Scottish Members of Council sent to London a statement, from which the following extracts are given:

1. That, while they admit the difficulties of Mr Farren's position in connexion with the 'Asylum' Office, it does not appear to them that the explanations now given are altogether satisfactory and they conceive it would have been better if Mr Farren had not been proposed for re-election as a Vice-President till the whole matter had been specially investigated.

2. That it is much to be regretted that Mr Hardy, one of the Examiners and formerly a Vice-President of the Institute, should have been a party to the published report of the Investigation into the affairs of the Professional Assurance Company, that report being, in the opinion of the Scottish Members, calculated not merely to weaken the public confidence in such Investigations even when conducted by neutral and professional Actuaries, but, as emanating from one of its leading Members, to injure in some degree the character of the Institute itself.

They are further of opinion, that in the selection of Office Bearers for an association, which was established for the purpose of elevating the character of the profession as well as the attainments of its Members, there are other and important considerations to be attended to besides their mere talents and acquirements as Actuaries, and it is with deference submitted that no Member should be recommended for official appointment in the Institute whose professional conduct had been the subject of public animadversion or discussion, unless the Council should have previously satisfied themselves, on due enquiry, of the groundlessness of the charges or objections made against such Member.

The statement concluded with a plain appeal for 'preventing the risk of permanent disunion which may otherwise ensue'.

The Council replied in January 1855 denying that it had the power,

and indicating that it did not desire, to call in question or to reverse the actions of 'its predecessors', or to commit its successors. This weak argument appears to have been regarded in various circumstances as a means of disposing of awkward requests.

The crisis came rapidly: the Scottish Members of Council replied that, unless they could have some hope of the practical recognition of the principles for which they stood (in the matter of election to prominent Offices in the Institute) they would be compelled to resign their membership of the Council. They appealed, however, for the submission to 'some neutral and influential parties' of the subjects in dispute and suggested Lord Overstone, Sir John Lubbock, Professor De Morgan 'or others of like standing'. They said also:

It cannot be denied, however, that the Institute, although it has achieved success in some respects, has not attained that high position which its founders originally aimed at, and that many Members of the Profession still withhold from it their support whom it would be most desirable to embrace within its ranks.

Perhaps there was an error of judgement in the final remark that they would 'if thought proper, be glad to unite in the application to be made to the above gentlemen or others who may be selected to undertake the reference'. In any case, the Council refused: after falling back upon a restatement of its willingness 'to give every possible consideration to any proposition that may be made not inconsistent with the Laws of the Institute for the wellbeing of that Body', the reply said:

They feel that it would be in the highest degree objectionable to place the destinies of the Institute in the hands of non-Professional persons who could hardly be expected to take charge of them under any circumstances, and would certainly be reluctant to do so after such an avowal of incompetency as the application itself would obviously involve.

Six Scottish Members of Council resigned, as such, on 21 February 1855 and the seventh, for there were actually seven, took the same course early in March (he had been away from Edinburgh). The last paragraph of the letter of combined resignation said:

The Scottish Members do not consider it necessary at once to resign all connexion with the Institute, nor do they propose for the present to bring

The Scottish Secession: final steps

the subject before the general Body of the Institute. They feel however that it is but due to the Fellows and Associates resident in Scotland that they should be made acquainted with the reasons which have led to the present resignation and it is accordingly intended to lay before them the whole correspondence.

On 30 April 1855, twenty-four Scottish members resigned from the Institute: the word 'defaulter' was placed, with pathetic precision, against the names of two of them in the Minutes. The Council accepted these resignations, on 24 May, 'with regret' and appointed a Committee 'to consider the present state of the Society's affairs'. And then, in November, after the summer recess, the resignations of forty-one other Scottish members were received and accepted. Not all the Scots withdrew: the Council referred in its *Report* for 1854-5 to the secession of 'a large portion'; and (the total membership being about 240) the actual number (65) of recorded withdrawals is considerably less than the proportion (more than one-third) mentioned in the Scottish members' statement already quoted.

With wistful dignity, the Council reported the loss to the Annual General Meeting on Saturday, 7 July 1855, thus:

The Council will regret this secession the less if the contemplated measure [of establishing an independent Actuarial Body] be carried out, and if it be the means of raising up in Scotland an efficient school of professional study.

The Faculty of Actuaries in Scotland was declared to be constituted at a meeting in Edinburgh on 4 January 1856.

There are some later references—for example, in the Minutes of Council for 9 February 1864:

Read a letter from Mr W. T. Thomson of the Faculty of Actuaries of Scotland, stating that a Committee had been formed by the Faculty to consider the proposed junction with the Institute of Actuaries.

RESOLVED: That a Committee, to consist of the President, and four Vice-Presidents, be formed, to act conjointly with the Committee of the Faculty of Actuaries of Scotland to consider the proposed combination of the two Societies.

No report has been found regarding this initiative in any of the records of the Institute. It appears however, from the Minutes of the Council of the Faculty of Actuaries for 14 May 1867, that the two

Committees held several meetings in London 'throughout which the most cordial feelings prevailed on both sides', but no scheme or plan of amalgamation appears to have been proposed. The only practical result of these negotiations was that the Institute made some changes in its Constitution and Laws intended, it is believed, to facilitate the admission of individual members of the Faculty should they feel disposed to join.

Nothing further appears to have been done in the matter and 'the negotiations then dropped amidst the mutual good wishes that the friendly correspondence and personal intercourse which had taken place might lead the two Bodies to co-operate to a greater extent than hitherto in their efforts to advance the objects for which they were formed'.

A new approach, apparently at the instance of the Institute, began in March 1870 and is mentioned in the next chapter, p. 107.

‘THE COMMITTEE TO CONSIDER THE PRESENT STATE
OF THE SOCIETY’S AFFAIRS’

Moved, as well it should have been, by the sense of immediate crisis, the Committee made its first report within 5 days and the Council met to consider it a week after having appointed the Committee. The report was couched in financial terms; there was no question raised of the continuance of the Institute or of any change of general policy, but the bringing of expenditure into relation with seriously reduced income had to be achieved without delay. The *Report* of the Council for the year 1853-4 stated that, during the last 5 years, the average yearly income had been £417. 17s. and the average outlay £436. 17s. 5d. In the report for 1854-5, the critical year, the income was given as £385. 7s. and the payments as £503. 12s. 8d. The fund in hand on 30 April 1855 was £127. 14s.

The recommendations of the Committee were approved by the Council with slight modifications and, as adopted, involved:

(i) The increase of the annual subscriptions of Official Associates and of Associates, the former, though retaining their designation, to be admitted to all the privileges of Fellows. The Associates were to be consoled by the reflexion that their new contributions would be at the same rate as that fixed when the Institute was founded.

An Unlimited Council

(ii) The placing of the management of the Institute in the hands of the Fellows. What this meant is shown by the following quotation from the *Report* for 1854-5:

It has for some time past appeared to the Council that the opportunities afforded at their frequent meetings for the discussion of practical and theoretical questions, and for the interchange of information, are among the most useful and important features in the constitution of the Institute; and being anxious that all the Fellows and Official Associates should participate in whatever advantages the Institute is capable of affording them in these respects, the Council propose that in future there shall be no limitation of their own number, as hitherto, but that all the Fellows and Official Associates shall have the option of attending Council meetings; any inconvenience arising on the score of too numerous attendances being obviated by the appointment of Committees, or by such other arrangements as may be found desirable.

This may be described as a policy of all hands on the bridge; there is no record of its having led to inordinately large Council Meetings.

(iii) The reduction to 6 per annum of the Ordinary Sessional Meetings.

All subscriptions were to fall due on the still familiar 1 October and the Annual General Meeting was brought forward by a month to the first Saturday in June.

The epoch of establishment had ended; much had been done and attention should be concentrated upon the achievement rather than upon the tragedy, as it seemed then, of Anglo-Scottish cleavage. The new star in the professional firmament might appear in 1855 to have diminished in brilliance, as it had lost in magnitude. Such a conclusion was to be upset by the long record of the later years, which have shown that what really happened was the mysterious birth, from the one star, of twin stars that have shone ever since as a single constellation, even though, from some aspects and at particular times, it was quite easy to see that they were two.

CHAPTER IV

THE INSTITUTE OF 1848: DEVELOPMENT 1856-84

Constitution, Bye-Laws and Government—Premises and staff—Meetings, Members and miscellaneous matters—External relations—The Royal Charter

In the short initial period of 7 years, the Institute had faced two serious setbacks. At the outset, in 1848, the unity of the actuarial profession had been lost because some of the most influential practitioners remained aloof; and, in 1855, the majority of the important Scottish section of members broke away. These two unhappy events must have given some cause for fearing that the Institute would fail, soon or late, to achieve the high purposes for which it had been established. But as in 1848, so in 1855, the situation was met with calm resolve and the Institute went on, chastened and renewed, to develop towards the fulfilment of its founders' hopes.

The period 1856-84 was one of solid work and steady progress that led to the twin achievements of incorporation under Royal Charter and of union of the broken body of English Actuaries. Apart from these great matters, much of the interest of the period lies in scattered and miscellaneous references, some of which are brought together under a few general headings in the following pages.

CONSTITUTION, BYE-LAWS AND GOVERNMENT

After the exertions of the first years and as long as the constitution of the Institute should remain substantially in its original form, it was not to be expected that much change would occur in the Bye-Laws or the general terms of government. Nevertheless, some alterations of importance were proposed. In May 1857, it was decided to recommend to the Annual General Meeting that for 'previously to the 8th July 1848' in Clause 6 of the Constitution, there be substituted 'for a period of 5 years'. This change was approved by the members

Changes in Bye-Laws

and widened the door for admission as Fellows of persons who were deemed worthy of that status, though they might not have obtained the Certificate of Competency.

In 1862, signs appeared that the government of the Institute was in process of reverting to the more formal basis in operation before the Scottish secession of 1855 caused the Council meetings to be open to any Fellow or Official Associate. Notice was to be given to each member of the Council that, at the meeting of May 1862, the list would be drawn up of President, Vice-Presidents and Officers for the ensuing year. Two years later, important constitutional changes were introduced in the following terms:

1. That it be recommended to the Annual Meeting to alter the Constitution and Laws so as to effect the following changes, viz.:

2. The Members to consist of two classes—Fellows and Associates; the term 'Official Associate' being discontinued.

3. The existing Official Associates to be Fellows.

4. Upon the nomination of the Council, any gentleman to be eligible by ballot as a Fellow, who shall have been for three years Actuary to the Government; Principal Officer, Manager, Secretary, Actuary or Assistant Actuary to any Life Assurance, Annuity, or Reversionary Interest Society; or who shall have obtained the Certificate of Competency; or who, although not an Actuary, may be eminent for Scientific attainments connected with the occupations of one.

5. Any qualified Associate to be admitted as a Fellow without ballot, on making application.

6. The Council to consist of thirty Fellows, of whom six shall retire annually, but be eligible for re-election.

The alterations were approved, 'with but one or two dissentient voices', at the Annual General Meeting in 1864 and so the door was left open, rather more widely, for the election of Fellows without examination. Moreover, the class of Official Associates disappeared; there were almost fifty such members, according to the list attached to the first edition of the Constitution and Laws, published in 1849. Doubtless, such a class (were it desirable and practicable to establish one) would be equally popular now, especially if it were introduced with the encouraging words of the President, Charles Jellicoe:

I will only further express my satisfaction, gentlemen, at the changes which you have to-day authorized in the constitution of this Institute.

The Institute of Actuaries, 1848-1948

I confidently believe that they will exercise a beneficial influence upon it. You have extended the arena, and have opened the door somewhat wider, it is true; but if advantage be taken of the opportunities thus afforded, the Institute may gain the adherence of many whose acquirements and ability will be of the utmost importance to it, and who being perfectly well able to discern and ready to recognize actuarial knowledge and skill, although not caring to be deeply versed in it themselves, will give, by their countenance and by their association with us, precisely that kind of stimulus which it is so desirable our peculiar pursuit should have; and who will, at the same time, bring into the common stock that familiarity with ordinary business and with monetary affairs, without which great mathematical attainments seem in our path to impede a young man's career rather than to aid it! On the other hand, those who may join us will come into a nearer intimacy with knowledge of the utmost importance in their affairs; and whilst by their adhesion they improve our position, will certainly strengthen their own. In short, gentlemen, we are doing our best to bring into closer relations the theoretical and practical branches of our profession; and there is no one, I think, but will, on consideration, admit that such closer relation must be advantageous to each.

The alterations of 1864 did not settle the constitution of the Institute for any long period. Clauses 4 and 5 were brought under review in the spring of 1869. The fresh changes (which affected the admission of Associates and Fellows) were relatively unimportant and were approved at the Annual General Meeting of that year. Even so, as time passed, increasing and natural dissatisfaction was felt at admissions without examination. Thus, at the Annual General Meeting of 1871 there was some very plain speaking, as the following extract (*J.I.A.* xvi, 308-9) shows:

MR WALLIS: I do not know, Mr President, whether this is the proper time to mention a matter which I think the Council ought to have constantly before them, and that is the definition of the term 'actuary'; so that it may be known to the public that there are certain persons recognized by the Institute of Actuaries as qualified actuaries. I would suggest whether this might not be done by some distinctive title or letters after a man's name. (Hear, hear.) At present a person can be an F.I.A. who knows nothing whatever about actuarial matters, in respect of his being or having been the secretary of an Insurance Company. Sooner or later I think that will have to be grappled with, inasmuch as the Life Assurance Companies Act provides that the calculations of an Office are to be en-

Who is an Actuary?

trusted to 'an actuary'; and if this Institute does not say who is an actuary and who is not, I am afraid we shall soon find ourselves put upon the shelf, and I fancy somebody else will become the Institute of Actuaries. (Hear, hear.)

MR A. H. BAILEY: I do not think this is the time to discuss this interesting subject, but I may remark that the Institute has spoken trumpet-tongued as to what it considers an actuary—namely, those who pass the three years' examinations; and what it hopes to accomplish is to get legal sanction—it aspires to no more than that—that only those who have passed the examinations shall be deemed competent to practise as actuaries. Until the legislature, in its wisdom, thinks fit to confer upon this or some other body some such power as that, it is impossible to do more than give certificates of competence under the sign manual of its president to those who pass the examinations. (Hear, hear.)

MR WALLIS: Don't you think the Institute might make a distinction between those whom it recognizes as actuaries and those whom it does not recognize as such? Any gentleman who has not passed his examination can put F.I.A. after his name, and Mr A. or Mr B., who knows nothing whatever of actuarial science, is very glad to put these letters after his name. It is worth considering whether the Institute should not take the bull by the horns, and say that in future no one shall be a Fellow who has not passed his examination. In the case of passing the College of Surgeons they are obliged to recognize as qualified all who were in practice in 1858; and I think that for the future this Institute ought to say that a distinction should be made between qualified and unqualified actuaries, especially as it has now got a good surplus and is not in want of money.

MR S. BROWN: It is important to draw attention to the fact that formerly the distinction which Mr Wallis suggests obtained, but under certain circumstances we effected a change. Therefore, it is important we should not do anything hastily. (Hear, hear.)

MR C. J. BUNYON: I think it a most objectionable thing that men should be allowed to call themselves Fellows of the Institute who, neither by practice nor theory, have entitled themselves to carry that distinction. In a correspondence which took place between one member of the Institute and Lord Redesdale at no very distant period, an objection was raised by his Lordship that some of the members were not persons whom he would regard as competent actuaries, although at the same time he considered that for a man to be a competent actuary was in itself a proof that he was a man of considerable attainments. But the answer made to his Lordship was to give him a list of persons who had passed the examinations, to show how considerable the number was. The matter, therefore, has been under

the notice of those persons who are qualified to judge, and I think the question is one which sooner or later—and I cannot think it can be too soon—must receive the deepest consideration both of the Council and the Institute itself. (Hear, hear.)

In April 1875 more changes were considered in the Rules governing the admission of Associates and Fellows. The terms were left unaltered as regards Associates but, for Fellows, the Council proposed and the members at the Annual General Meeting agreed to revised Rules, that

- (a) removed, in the case of an Associate holding the Certificate of Competency and wishing to become a Fellow, any requirement that he should have occupied a particular official position, and
- (b) somewhat modified and generally clarified the conditions on which other persons could be elected to the Fellowship.

In October 1858, the practice was begun of holding Council Meetings on the second Tuesday of the month: the custom was broken, like so many others, by the War of 1939-45. It was decided, in 1881, 'that an abstract of the business to be presented at each meeting of the Council be sent to each member of the Council during the week preceding that in which the Council meets'.

The Council found it necessary to govern its own members—in May 1871:

The Hon. Secretaries stated that they had received a letter from a member of Council drawing attention to the fact that the affairs of a particular Assurance Company had been discussed at an Ordinary Meeting of the Institute contrary to understood custom; it was

RESOLVED: That the Council recognizes fully the principle that the affairs of particular Offices are not to be discussed at the meetings of the Institute and admits with regret that this salutary rule was to a certain extent infringed on a recent occasion.

ORDERED: That a copy of the above Resolution be forwarded to such Member of Council [apparently, he was not present to voice his complaint].

Soon afterwards it was moved and seconded that

Questions having arisen as to the rights and privileges at the Council Board, and in relation to the duties and honours of the Institute, of

members of Council holding different official positions, the Council deem it desirable to record:

1. That at the Council Board all members of Council are on a footing of equality.
2. That, *caeteris paribus*, all members of Council are equally eligible for the various offices within the Institute.

The Minute adds: 'Whereupon the previous question was moved by Mr Tucker, seconded by Mr Brown and resolved in the negative.'

In May 1877, the Council reviewed its own constitution and accepted the report of a committee as follows:

The Committee consider it to be desirable that a portion of the Council should consist of permanent members in order that the traditions of the Institute may be preserved, but think that with regard to the remainder it would be well to substitute retirement by rotation for the present system of retirement according to the number of attendances, retaining however the old system to this extent, viz.: that if any town member does not attend once in the course of the Session he should retire. All members to be eligible for re-election after having been out of office for one year and all new members to take the place on the rota of the member in whose place they are elected. The Committee suggest that the President and Vice-Presidents, Treasurer, and Honorary Secretaries whether present or past should not be placed on the rota. These are 12 in number and consequently there will be 18 whose retirements it is proposed to spread over six years.

This system was modified in 1882, when it was resolved:

That members who hold or have held the office of President or Vice-President shall remain permanent members of the Council.

That five seats including deaths and resignations be declared vacant annually, the retiring members not to be eligible for election for a year.

The rota for retirement was to be modified 'in special cases approved by the Council'.

In 1867, the Council had three Standing Committees under the titles 'Mortality Experience', 'Parliamentary' and 'Hardy Memorial and Library'. The name of the 'Parliamentary' Committee was enlarged soon afterwards to the 'Legal and Parliamentary' Committee and it was instructed to consider the desirability of obtaining a Charter.

The system of Standing Committees was extended in October 1878 thus:

Resolved that there be formed

1. A Library Committee.
2. A Mathematical Committee with charge of the text-book.
3. A Finance Committee.
4. A General Purposes Committee to consider special subjects referred to it by the Council.

There was a request in December 1865 from an Associate for election as a Fellow, on the ground that he had been Secretary to the Bombay Branch of the Albert Life Assurance Company for three years. It was resolved:

That in the opinion of the Council, Mr Ogbourne being the Secretary of a branch of the Albert Life Assurance Company and not of the principle [*sic*] Office, is not qualified by Clause 5 of the Laws for admission as a Fellow.

There appears to be no ground for assuming that the spelling used for the word 'principal' was adopted deliberately.

The admission of new members was controlled in a manner that now would be neither permissible because of the Charter, nor desirable on general grounds. Thus, in January 1876, an application for associateship was rejected because 'having regard to the present number of members, the Council think it expedient as a general rule to restrict future admissions to gentlemen engaged in Assurance Offices'. It was resolved also that, to facilitate business, voting papers for the election of candidates be prepared 'similar to those used by the Statistical Society'.

A few months later, a nomination paper was ordered to stand over for further information of the applicant's 'intentions and objects in desiring to join the Institute'. Another paper signed by two members 'certifying general acquaintance' was rejected in 1877, the candidate to 'be requested to procure signatures as to personal knowledge'.

The question was mooted at the end of 1880 whether the rules and the nomination form were in agreement. Soon afterwards, it was decided that the word 'Associate' be printed in the nomination form 'instead of a blank being left to be filled in'. This step may have been taken to discourage inconvenient nominations for direct Fellowships.

Towards the end of 1883, there was a steady influx of new Scottish members. A very considerable number of general applications for membership was rejected during the immediately pre-Charter years.

The form of the Certificate of Competency came under review in 1856 and the reference in it to the Registrar was replaced by mention of the Hon. Secretaries. In 1860, it was ordered that a certificate signed by the President and the Hon. Secretaries be granted, when earned, 'upon payment of the usual fee of 5 guineas'. T. B. Sprague drew attention, in 1871, to the wording of the certificate when he moved a resolution:

That the form of the Certificate of Competency be altered with the view of rendering its terms a less positive recommendation on the ground that no man can be considered qualified (or competent) to act as Actuary unless he has had some office experience.

Doubtless, in consequence of this suggestion (though the direct motion was proposed by A. H. Bailey) it was decided in December 1872 to omit from the certificate the words 'and able to discharge efficiently the duties appertaining to the office of an actuary'. The fee of 5 guineas was cancelled at the same time, though not probably on the ground that the certificate was of lowered value. The plate from which the certificates were printed was altered at a cost of £2, in preference to the preparation of a new plate for which the charge would have been £6.

W. Sutton caused a mild disturbance in May 1872 when

The President reported that Mr Sutton had applied for the Certificate of Competency to which he was entitled and that the same had been signed in consequence; and that Mr Sutton having since withdrawn his application it became necessary to cancel the Certificate. The Certificate was thereupon cancelled.

ORDERED: That for the future all Certificates of Competency be signed at Council Meetings.

The member renewed his request in November 1873 and tried to avoid the consequences of the change made meanwhile in the form of the certificate:

I beg respectfully to make a formal application to you for the Institute's certificate of competency to which I became entitled in January 1869. I believe that some changes have recently been introduced into the form

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of certificate, but I presume that I am entitled to the form of certificate as it existed when I passed the final examination. I beg leave also to ask your permission to have inserted at the foot of the certificate a note stating when the certificate was acquired.

RESOLVED: that a Certificate in the new form be granted to Mr Sutton and that a memorandum of the date of his passing the 3rd year's examination be placed thereon. The Certificate as approved was accordingly signed by the President and Hon. Secretaries.

Disciplinary action appears to have been considered possible in 1871 with regard to a Fellow concerning whom some unspecified decision had been made by the Master of the Rolls. The Fellow in question resigned immediately.

The Council took notice in December 1878 of a reference in a City article of *The Times* to a member who had been described as an Associate, by examination, of the Institute in the announcement of his admission to partnership by an accountant. It was ordered that the member be 'communicated with', but no further reference occurs. The same sister profession was concerned in a case that arose in December 1879, when it was reported that a member of the Institute of Accountants, not being a Fellow of the Institute of Actuaries, was using the letters 'F.I.A.' in an advertisement. The Hon. Secretaries were able to report at the next meeting that the Secretary of the Institute of Accountants had obtained a promise from the offender that he would cease to use the letters.

PREMISES AND STAFF

The rooms in St James's Square were occupied until Michaelmas 1874, when the Institute moved, with the Statistical Society, to the Principal's house in King's College. There is little in the Institute's records about St James's Square. One rather curious entry in 1859 mentions that the International Decimal Association had received permission from the Statistical Society's Council to hold a meeting in *its* rooms if the Council of the Institute concurred. In doing so, the Council of the Institute stated that it had 'no objection to the announcement that the meeting will be held at the rooms of the *Institute of Actuaries*'. In May 1862, it was agreed to pay £5 'towards the cost of fixing a permanent washing-place, etc. for the use of

Premises for Learned and Scientific Societies

members'. The rent was increased on renewal of the lease in 1866, the Institute's half-share rising from £75 to £100 p.a. The ventilation of the premises was not satisfactory to the Statistical Society, for in February 1868 it sought and received the Institute's co-operation in a proposal 'to make an attempt to ventilate the meeting-room, provided the Institute would bear half the expense which would probably be about £4'.

More general light on the conditions is obtained from *Annals of the Royal Statistical Society, 1834-1934*, thus:

A renewal of the lease of the rooms in St James's Square was secured in 1866, but the space was already inadequate. How inconvenient the scanty accommodation was may be gathered from a report by the Library Committee in June 1872 that all available space was used and that during the past four years less than £12 a year had been spent on books and binding. The Registrar-General offered to store any surplus books, and the Library Committee was authorized to accept his offer and deal with three hundred or four hundred books which could not be sold as they had been presented to the Society.

It is clear from these *Annals* and from the Institute's records that, from 1858 onwards, efforts were made to secure some better provision for the accommodation of several of the learned societies. There is an Institute Council's Minute of April 1858 recording 'a letter from Mr Furnivall asking the Institute to join in a deputation to Lord John Manners for the purpose of obtaining rooms in Somerset House' but no decision is indicated. In April 1870, the Council appointed delegates to attend a meeting to discuss a matter raised in a circular letter from the Statistical Society 'representing that for some years past complaints had been made by many of the learned and scientific societies of the insufficiency of the house-accommodation they obtain, as compared with the cost they are compelled to pay for it'. Seventeen societies were so represented and the following resolutions were carried unanimously:

1. That in the opinion of the present Meeting, it is desirable to establish co-operation in order to obtain a building for the accommodation of Learned Societies.
2. That the Learned Societies be invited to inform the Statistical Society, on or before the 31st May prox., whether they concur in the proposal to

secure Combined House Accommodation and to nominate from their respective Councils one member to serve on a Joint Committee to forward the object.

The Council of the Institute accepted these proposals, nominated its President (Samuel Brown) to serve on the Committee and, some months later, agreed to pay £5 towards preliminary expenses. There the record ends in the books of the Institute, but the *Annals* give a fuller account:

A Housing Committee was set up in February 1870, and in December of the same year Dr Guy read before the Society a paper 'On the Claims of Science to Public Recognition and Support—with Special Reference to the so-called "Social Sciences"'. He referred to the Royal grants of rooms in Somerset House to the Royal Society, the Society of Antiquaries, the Geological Society of London, and the Royal Astronomical Society, and of sites to the Royal Society of Literature opposite St Martin's Church and to the College of Physicians in Pall Mall, and, quite currently, of rooms to the Chemical and Linnaean Societies in Burlington House. He appealed for the grant of a site and the same plea was made to the Chancellor of the Exchequer in the spring of 1871 by a deputation from the Statistical Society, the Social Science Association, the Institute of Actuaries, the Meteorological Society, the Juridical Society, the Anthropological Institute, the Iron and Steel Institute, the Photographic Society, and the Royal Colonial Institute. They asserted that they were 'prepared to raise among their members a sum of, say, £20,000 and to expend it in the erection of a building of appropriate ornamental character, which they would prefer to place on some spot bordering on the Thames Embankment, and in the neighbourhood of Whitehall'. The Chancellor referred them to the Office of Woods and Forests, where their request shipwrecked. The Joint Committee of the Associated Societies was by no means harmonious. Some members held moderate views, others favoured grandiose schemes; gradually the unwillingness to accommodate their several requirements grew. Dr Guy came forward with another scheme, which he explained in a letter of 17th February 1873, to Dr Farr as President of the Society. A syndicate was to be formed to raise £40,000 in £10 shares; he had already secured promises to take up 1,500 shares. The Banqueting Hall in Whitehall was to be completed by the erection of an harmonious building; the site was to cost £11,500 and erection £23,250, leaving £5,250 for extras, and about £4,000 might be borrowed to build a lecture theatre. An income of £3,250 a year could be got by sub-letting, which would enable a dividend of 5 per cent. to be paid and

The Principal's House in King's College

leave a contribution towards maintenance. Plans of the building were drawn, but again the scheme foundered on disagreements and jealousies.

There was a notice of motion by the President of the Institute that, at the Council Meeting of April 1873, he would move that the sum of £1,000 be invested in the Scientific Societies House Company Limited, but nothing appears to have been done.

The Council of the Institute resolved in May 1873 to obtain the views of the Statistical Society upon the continued joint occupation of the rooms in St James's Square after the expiry of the tenancy at the following Michaelmas. Also, a Committee was appointed 'to make enquiry and report respecting such house accommodation as may be obtained suitable for the purposes of this Institute'. The two Bodies remained where they were for a further year, but in May 1874 the Council appointed another Committee for similar inquiry. The first reference to the move to King's College is found in the Minutes of the meeting of the Council in July 1874, when the following letter was received:

I am directed by the Council of the Statistical Society to intimate for the information of the Institute of Actuaries that they have secured the house of the Principal of King's College for their future quarters at an Annual rental of £200 and that they offer to the Institute an Office on the ground floor, the joint use of the First Floor for Meetings and such further accommodation for books and stores as they may require—the two Societies to contribute in equal proportions to the Rent, Water and Gas rates, resident Messenger and other like expenses—also in the event of the two Societies continuing to occupy the Principal's House for 5 years or longer, half the contribution of £25 towards ornamental repairs as per Agreement—a copy of the terms of the Agreement between the Principal of King's College and the Statistical Society will be furnished to you and the Council hope that the future relations of the two Societies in their new abode will be as agreeable and mutually advantageous as their joint occupancy in St James's Square.

It was resolved to accept these proposals, subject to inspection of the premises by the Hon. Secretaries and to 6 months' notice on either side. A later report states that the Principal's house was 'situate at the South-East corner of the Quadrangle' and that the second floor was excepted; the period of notice was reduced to three months and, although such items as floor-cloth were to be in common, 'each

Society shall furnish for itself the Room on the Ground Floor'. The Institute paid £99. 17s. 6d. to Messrs Neal and Co. of 161½, Strand, for the furnishing 'of the separate rooms'.

The *Annals* state that the premises were 'comfortable and commodious', but had to be given up in 1884 when Canon Barry, the Principal, was translated to the Bishopric of Sydney.

On a review in 1875 of the arrangements for insuring the books and furniture against fire, it appeared that there was a policy for £400 in the 'Sun' Office. The Council resolved to increase the amount to £500 and to transfer the risk to the 'Norwich Union', the policy to stand in the names of Charles John Bunyon, Archibald Day and Henry William Porter.

In April 1878, discussion occurred between the Institute and the Statistical Society after the latter 'had underlet a portion of the house in King's College to the Institute of Chemistry at a yearly rent of £30'. The Minute says:

Read letter from Mr Chubb, one of the Hon. Secs. of the Statistical Socy. as follows:

The matter about which you and Mr Berridge were good enough to see me, was brought fully before the Council of the Statistical Society at their last meeting, with a result which I trust will be satisfactory to you. The Council felt that in making the arrangement with the Institute of Chemists they were only acting within the terms of the agreement which was entered into between the Institute of Actuaries and themselves when the King's College premises were taken—these terms being that certain accommodation should be secured to the Institute of Actuaries on certain conditions. But, looking to the view which your Council has evidently held in regard to these arrangements, and to the relations so long existing between the two Societies, they are not unwilling to agree that any advantage which may accrue from the sub-letting of the room now occupied by the Institute of Chemists, should be shared equally.

I think you are aware that at present one only of the upper rooms is let to the Institute of Chemists for £30 a year; but it is thought not improbable that they may before long require more accommodation, including the occasional use of the meeting room. Under such circumstances you may be quite sure that the convenience and interests of your Society will be consulted

Assuming that your Council will agree to the proposed arrangement in regard to the £30 rent now receivable, I presume that a satisfactory way

A further removal contemplated

to carry it out will be to deduct a moiety of any sum which has been received from the Institute of Chemists, from the sum asked from you each quarter in respect of your rent.

RESOLVED that the proposal of the Statistical Society contained in Mr Chubb's letter be accepted and that the Hon. Secs. be requested to acknowledge the receipt of the communication and to say that this Council will be prepared to consider any proposals for the further accommodation of the Institute of Chemistry.

The drafting of the last part of the Resolution is both tactful and effective.

An abortive proposal to move again came up in January 1880 when it was 'ordered that the President, jointly with Dr Guy of the Statistical Society, obtain Architect's report as to the suitability of, and cost of alterations necessary at the house in Savile Row lately occupied by the Scientific Club, for occupation by the two Societies'. In March the Council discussed the question of house accommodation and resolved not to take rooms offered at 18, Lincoln's Inn Fields. Clearly, both Bodies were unsettled at King's College—perhaps because the accommodating and Reverend Principal was already ripe for translation—and in the same month, the Council of the Institute passed the following resolution:

It was agreed that the Institute of Actuaries does not wish to disturb the existing tenancy arrangement with the Statistical Society: but if the latter decide to give up the occupation of the present rooms and take a house elsewhere, the Institute will be willing to become their tenants at an annual rent not exceeding £150; to include all expenses, provided that the situation of the house be approved by the Council of the Institute and that the following accommodation be furnished viz.: The use of a large room for the ordinary meetings and examinations. The use of a room for Council meetings. The exclusive occupation of a room sufficient for the Library, Classes, and business purposes. Accommodation for storage of books and papers.

In May 1882, intimation was received of 'a house it is proposed to erect for the use of learned societies'. The Council replied that it had 'no desire to alter present arrangements'; but these were shortly to come to an end, for, in October 1883, the authorities of King's College gave 6 months' notice to determine the joint tenancy. It was decided (a) that the Institute would prefer to be sub-tenants of

the Statistical Society rather than joint-tenants with it and (b) that the Institute should not promise 'to follow the Statistical Society unless the Society can offer the Institute suitable accommodation as to site and size' and 'at a cost to the Institute of £150 a year including rates, taxes and repairs'. There was another possibility, brought forward in February 1884, of the Institute's going to premises in Surrey Street, Strand, but nothing came of it. Eventually, an agreement was made with the Statistical Society for a term of 3 years and the Institute moved, as the following extract from the *Annals* shows:

In the autumn of 1884 the Society moved to 9, Adelphi Terrace (taking with them the Institute of Actuaries and the Institute of Chemistry), 'on the receded bank of the Thames', said Dr Mouat (Jubilee Volume, page 37), 'with greater fixity of tenure but equally little likelihood of taking root and flourishing there'—a gloomy forecast which time has belied.

The record of the period as regards staff is clouded by an unhappy event. It was reported in May 1859 that the Assistant Secretary had embezzled a considerable amount of the Institute's money and some of that of the Statistical Society. He was dismissed and his name expunged soon after from the list of Associates. A sum of £100 was recovered from the Guarantee Society under a Fidelity Bond. The Institute received £90. 8s. 1d. and the Statistical Society, £9. 11s. 11d. The incident led to the adjournment until October of the Annual General Meeting and was closed meanwhile by a voluntary subscription of the members of the Council, by which the remaining loss to the Institute of £75. 9s. 1d. was made good. Steps were taken 'to prevent the recurrence of similar irregularities'. F. W. Haddon was appointed Assistant Secretary, at first on a temporary footing, and a clerk was engaged at a cost, for some 6 months, not exceeding £10. In July 1860, the clerk stated that he had been requested to resign his similar position with the Statistical Society and so felt that he ought to place the office of clerk to the Institute at the disposal of the Council. It was decided to ask the Society why he had been asked to resign and to say that the Council had no reason to be dissatisfied with his conduct. No written answer was received but, after a special meeting, the clerk's resignation was accepted with an expression of regret.

Frequent changes of Staff

When, in 1862, the Assistant Secretary applied for an increase of salary (which was £100 p.a., paid as to £40 by the Institute and as to £60 by the Statistical Society) he was given a rise of £25, of which the Institute bore £15. A Fidelity Bond was required in £100 for each of the two Bodies. It was ordered that the Institute's bond be deposited with the Treasurer and that the official receipt for the renewal premium 'be presented to the Council, for inspection, at its March meeting in each year'.

Haddon resigned in 1863 and left on very happy terms, the Council recording its high sense of the zeal, fidelity and intelligence with which he had served the Institute for 8 years. He was asked to accept the sum of 20 guineas, as a mark of the Council's esteem and an expression of its good wishes 'for his success in the new sphere of action upon which he is about to enter'. Six candidates were interviewed and F. Gover was appointed Assistant Secretary to both Bodies 'for three months on probation, at a provisional salary at the rate of £80 per annum'. He was to give security 'for his fidelity in the discharge of his duties'. On revision of salary in March 1865, the Assistant Secretary reached £100 p.a. (two-fifths being paid by the Institute) and the Messenger was advanced from £80 to £90 p.a. (one-half to be borne by the Institute). Later, the Assistant Secretary received a total salary of £125 p.a. and the clerk had £50 p.a.

It is recorded that in 1870 the Messenger was granted £1. 1s. as a Christmas present.

Gover resigned in 1873 and Joseph Whittall was appointed Assistant Secretary to both Bodies. Soon afterwards, he asked for further help in the performance of his duties and that his son be made clerk. The request was refused and it was decided to ask the Statistical Society to join in giving 3 months' notice to the Assistant Secretary and to James Stark 'in order that the Institute may have Officers of its own'. Whittall left after 6 months' service, but James Stark appears to have remained for, in October 1874, he resigned from the post of 'Joint Messenger' and was granted full salary up to Christmas and thereafter a pension of £20 p.a. 'in consideration of his long and faithful service'.

The new Assistant Secretary was W. H. Harding, who received 25s. a week, subject to a month's notice and to his giving 'the usual security to the extent of £100'. He was succeeded in 1875 by

G. R. Dick, M.A. (Cantab.), whose salary was to be £100 p.a. 'with such fees as the Council may hereafter determine shall be paid by the students of the Class for the First Year's Examination subjects'. Dick was thus to be a tutor as well as Assistant Secretary. He remained for only two years and, upon his going, C. H. W. Biggs was appointed in 1877 in the same dual capacity. The Fidelity Guarantee was to be for £200, the Institute paying the premium.

Despite the intention, expressed in 1873, that the Institute should have officers of its own, it seems that the Messenger-housekeeper was still joint in 1881, for the Statistical Society then asked the Council to agree to an increase of his wages.

Biggs resigned in 1884 and J. C. Hopkinson became the eighth Assistant Secretary of the period—at a salary of £80 p.a., subject to a Bond for £200.

MEETINGS, MEMBERS AND MISCELLANEOUS MATTERS

The meetings of members of the Institute continued to receive papers on a wide range of subjects; sometimes, two unassociated contributions were read at the same meeting. Reports of the meetings were published in certain papers; the following extract from the Council's Minutes of May 1863 is a piquant reference to the practice:

Read a letter from Mr R. Tucker, V.-P., complaining of certain expressions in a report of the paper read by Mr Sprague at the last meeting of the Institute, printed in the *Post Magazine*.

RESOLVED: That the Honorary Secretaries be requested to inform Mr Tucker that the Council is not responsible for the reports of the proceedings of the Institute which appear in the newspapers, but that the Council regrets that the statements in question should have been made.

When plans were made for the reading of Archibald Day's paper, 'On the Statistics of Second Marriages among the Families of the Peerage', the Assistant Secretary was 'requested to advertise it in *The Times* newspaper on the preceding Friday'.

From the beginning, it has been the regular practice of the Institute to publish in the *Journal* the papers presented at the meetings. Occasionally, and for various reasons, the practice has not been followed, but it is believed that the instance now to be cited is unique, not merely as an example of successful objection from an outside

source but also of any such attempt to secure suppression. In November 1868, M. N. Adler of the 'Alliance' wrote concerning his paper entitled 'Insurance Business in Germany' and the Council's Minute runs thus:

Read a letter from Mr M. N. Adler in which he stated that, as several of the Directors of the Company with which he was connected had objected to the publication of the paper he recently read to the Institute, he hoped that the Council would dispense with the publication—and it was agreed to do so.

There was a curious incident in 1870. Jardine Henry complained of 'damages sustained in travelling by his brass triangular instrument'. A fellow-member was asked to act as a claims inspector and succeeded in settling the matter for £3. The nature of the instrument is not stated, but it may be relevant to recall that, some 3 years before, Henry had contributed a paper 'On an Instrument for furnishing the D numbers, to four figures each, in Two Joint Life Annuity Tables, on any basis' and had presented this instrument to the Institute! Later, Jardine Henry made a request for a subscription towards a new work in French and, still later, for the purchase by the Institute of a copy of his Tables. The Council was firm and he desisted in the end.

It was suggested in 1872 'that it would assist the younger members in taking part in the Ordinary Meeting discussions if they could obtain proofs of the papers to be read prior to the days of meeting'. The Council decided:

That upon occasions when proofs of a paper are to be circulated before its reading, copies shall be left at the rooms of the Institute to be handed to members upon application not earlier than the Saturday prior to the reading.

The Institute has suffered from time to time from papers (and other publications) of inordinate length. A useful precedent, not always followed, was established in 1872 when the referees appointed to consider a paper offered by F. G. P. Neison (Jr) reported thus:

The Tables as now presented are too voluminous to admit of being copied in full and suspended in the Rooms of the Institute. The Author is recommended to abridge them for this purpose, to say, a third or a fourth of their present bulk.

The stream of papers dried up from time to time. Thus, in April 1878, it was 'ordered that the Hon. Secretaries be requested to enquire

and to arrange for a paper to be read at the next ordinary meeting'. In the following April, Cornelius Walford was to be approached by the Hon. Secretaries 'to ascertain if he can prepare a paper to be read' at the meeting due to take place after only 20 days. Less than 2 years after this incident, William Sutton (though he was present at the meeting of the Council) was requested 'to ascertain whether a paper mentioned by him as in preparation would be ready for the next ordinary meeting'. In May of the same year, 1881, it was ordered that 'Walford's paper on "The Position of the Insurance Press in relation to Insurance Offices and Insurance interests", read in the previous March, be printed in the *Journal* of the Institute *but not the discussion*'. The last four words were added and bear the President's initials. The paper (*J.I.A.* xxiii, 18) laid down thirteen principles on which an Insurance journal should be conducted, and five things that 'it should not be or do'.

Questions of copyright arose at intervals and the Council usually allowed the applicant to retain the ownership. Sometimes, authors were granted permission to have reprints of their papers made for private circulation, but not for sale.

Assistance to authors in respect of the cost of computing was introduced when, in 1876, W. Sutton was 'authorized to obtain assistance to the extent of £10'.

Apart from ordinary papers, there were occasional lectures. Doubtless, these formed the rudimentary beginnings of more formal courses of instruction, whether for examination students or for members interested. For example, as early as 1856, Peter Hardy's offer of a lecture 'On Elementary Illustrations of the Theory of Life Assurance and Annuities' was accepted.

The Council had to deal with numerous questions affecting the general body of the Institute. A decision in 1861 whereby new members 'elected at a late period of the session shall not be required to pay any subscription for the financial year then current' was changed in 1862 to the more definite and possibly less favourable ruling that only half a subscription be charged to new members elected after the February meeting. A further alteration was made in March 1882 when the Council

Resolved that the subscriptions of members elected at the last ordinary meeting—except in the case of candidates entering for the examinations—

Defaulters

who will be required to pay the subscription for the current year—entitle them to the full benefit of membership till the end of the next financial year and the same to hold good in the case of foreign members elected at the last two ordinary meetings.

Defaulters were to be noted carefully. It was resolved in 1867:

That at the beginning of each year a receipt be made out for every subscription (whether an arrear or a current subscription) so that at the end of the year the receipts not taken up may at once show who are defaulters.

In 1884, the Hon. Secretaries were authorized 'to deal with members whose subscriptions are in arrear' at the close of each session. On one occasion, some years before, 'the Council permitted' two persons 'to be removed from the list of members'.

A strangely strict attitude was taken, in October 1870, with regard to an application by Sir William Thomson (of whom no other particulars are given in the Minutes) on behalf of his brother, Robert Thomson, of Sydney, New South Wales. A Fellow, he had been declared a defaulter in 1869 because his subscription was unpaid. Sir William explained that he had forgotten to carry out a promise to his brother to see to the regular payment and requested that Robert should be reinstated. It was

Resolved that a copy of the Constitution and Laws be forwarded to Sir Wm. Thomson and that he be informed that it is not in the power of the Council to replace Mr Robert Thomson on the list of Fellows; but that if it is his wish to rejoin the Institute he must be nominated and elected in the ordinary manner.

Robert Thomson had been thanked by the Council in 1863 for sending information about Life Assurance in Australia and had been invited to continue to do so.

Fifteen Corresponding members were ordered in 1869 to be omitted from the list; no reason for this purge is given or is now apparent.

Composition Fees, otherwise called Life Subscriptions, were ordered in 1863 to be invested and a sum of £100 was so applied soon afterwards. In 1875, the composition fee for Associates was fixed at 10 years' purchase of the full ordinary annual subscription of 2 guineas. There is no mention of any terms for Fellows, though

doubtless they were permitted to commute on some basis. When, in 1878, it was decided to indicate in the List of Members those who had passed the second examination or the final examination, the Council ordered 'that the asterisk heretofore distinguishing those members that have compounded for their subscriptions be omitted in future issues of the printed list of members'.

From a lengthy report by the Hon. Secretaries in 1871, it appears that the average annual income from subscriptions during the period 1866-70 was £488, the total expenditure (including £120, the cost of the *Journal*) £459, the margin being thus about £29. One composition fee of 30 guineas and two certificate fees of 5 guineas each were received on the average each year and the funded property (apart from the Brown Prize money) was represented by £1,100 of Government Stock. Of this total, the Messenger Legacy Fund was about £211 and the Hardy Memorial Fund £200. It was stated that no condition attached to the income from the 'Messenger' Fund, but that dividends on the 'Hardy' Fund had to be appropriated until 1874 in the purchase of books. The suggestion was made that these purchases might be completed in advance at a cost of some £25, so that the whole remaining fund 'would then be free from restriction as to the appropriation of the Income'. The conclusion was drawn that 'the Institute has, independent of receipts from compositions and certificate fees, a surplus income of £60 p.a. which might safely be made available for additional assistance to the Editor of the *Journal* and for the suggested payment to a Tutor or Lecturer whose appointment has been thought desirable by some members of the Council'. The Hardy Fund was merged with the General Fund in 1878.

An extension of the President's work began when the Council resolved in 1880 'that the President deliver an inaugural address at the First Ordinary Meeting' of the Session. A. H. Bailey opened the series that has continued even until now.

A comparatively modern development of the Institute's activity was anticipated by an Associate who, in 1873, wrote to the Council thus:

As a member of the above Institution, and as one very desirous of obtaining an appointment as Accountant, Sub-Accountant, or otherwise in a first class Life Office and on behalf of others similarly circumstanced I write to suggest and trust you will pardon my so doing—that a register

Notation. The 'Messenger' Bequest

be kept at the office of the Institute of members desirous of obtaining appointments. Managers of Life Offices will likewise, be afforded the opportunity of selecting the most suitable and efficient men to fill vacancies that may from time to time arise in the respective departments under their control.

Trusting that this application will meet with your favourable consideration.

It was resolved:

that the Register proposed be instituted and that the Hon. Secretaries be requested to draw up a scheme to be submitted to the Council as to the information to be placed in the Register, the publicity to be given to its contents and the means of bringing it under the notice of the members.

No record remains of action or result.

The important subject of Notation came up in 1872 when a committee of the Council suggested and it was agreed that a scheme should be printed as an appendix to the Report of the Mortality Experience Committee. A special meeting of the Council had to be called in January 1878 to deal with a long editorial note that T. B. Sprague wished to prefix to a paper by J. R. Macfadyen on Reversions (*J.I.A.* xx, 385). The author desired to use 'j' for 'd', but Sprague (a law to himself in such matters as spelling) objected. The Council did not like Sprague's note as it stood, but asked Macfadyen to employ 'd' and he agreed. Had he not done so, the President and the Hon. Secretaries would have been obliged to edit Sprague's note.

In March 1857, the Institute received a sum of £174. 15s. 10d. by bequest of Mr James Messenger, who had been in the service of the 'Pelican' Office. Soon afterwards a solicitor applied, without success, to the Council for the grant of a portion in favour of the testator's brother-in-law. It was decided to invest the legacy in the purchase of Consols, the interest to 'be applied from time to time as the Council may see fit in awarding prizes to members of the general body who have distinguished themselves by their writings, or who deserve any special mark of distinction for the manner in which they have passed the examinations of the Institute'. This original intention was modified almost at once in favour of a plan to have a prize competition restricted to Associates, the award to be of the value of £10 but not to be given in money. The first subject selected had 'reference to the methods of distributing surplus amongst the persons

assured in a Life Assurance Company' (*J.I.A.* viii, 240) and, like its successors, the Council hoped 'in due time, to receive some good essays on this important and interesting inquiry'. Although the competition was intimated to Associates by circular and was advertised, only one essay was received. The judges 'found it to possess some merit' but they could not recommend that any prize be given.

The competition was reopened forthwith with the same subject and on the old basis. In its report presented at the Annual General Meeting of 1861, the Council had 'the satisfaction of announcing that essays on the prescribed subject' had been sent in and the prize awarded to W. P. Pattison. Before the close of the year, the successful candidate wrote on another unspecified matter to the Council, which resolved:

That Mr Pattison be informed that his letter has been laid before the Council, but as the charge contained in it is not sufficiently explicit against any individual member thereof, they do not think they are justified in further considering it.

Pattison was elected to Fellowship in 1862.

More Messenger Prizes were offered from time to time, by no means always successfully. In 1869, it was resolved to advertise the competition in *The Times* and *Athenaeum*, a sum of £5 being 'allowed for that purpose'. Dr T. B. Sprague drew attention to the recurrent disappointment in a letter read to the Council in February 1872:

We were all disappointed to learn that no Essay had been sent in for the Messenger Prize. The subjects proposed for this prize for a number of years past have been of a theoretical nature; and it appears desirable that a subject of a more practical nature should now be proposed. I therefore propose that the subject for the next essay should be 'Bookkeeping and Office Routine'. I further propose that as the funds of the Institute have largely increased and there is an accumulation of dividends on the Messenger Prize Fund, the amount of the prize to be offered should be increased to 20 guineas. It might also probably serve to interest more persons in the subject if a prize were also offered for the second best essay; and in that case it might be well to open the competition to all members of the Institute with the exception of course of the Office bearers.

The last two words were substituted for 'Council' in the Minute.

Another prize fund was set up in 1870 when Samuel Brown, on retiring from the Presidency, made a gift of £200 'suggesting that

Death of the First President

the income thereof should be appropriated as a Prize for an Essay on some subject in Political or Social Economy'. It was resolved to undertake 'this trust' and to record the Council's 'sense not only of the value of the gift, but of the uniform courtesy, zeal and ability which in various offices and capacities Mr Brown had for a period of 22 years, at the sacrifice of much valuable time, devoted to the service of the Institute'.

The money was invested in buying £95. 15s. 5d. of 10½% East India Stock.

Samuel Brown prizes of 50 guineas and 20 guineas were offered in 1883 for an essay on 'the History of Life Assurance in the United Kingdom'. The competition was not restricted to members of the Institute but, nevertheless, only three essays were received. The prizes were won by members.

T. B. Sprague, in 1867, informed the Council that 'he thought it would be desirable to offer every year a prize for the best essay on some subject connected with actuarial business of not too difficult a nature, to be competed for by Associates who have passed the Second Year's Examination'. It was decided merely to offer a prize of 10 guineas 'this year'.

The use of the Arithmometer was mentioned in 1870, when the Council authorized the editor to accept a description and an illustration offered by W. A. Gilbee. No article by him was published, perhaps because of several allusions by others to the same subject. However, the Council showed practical interest by deciding in 1872 to buy a machine, at a cost of £36, as a gift to Peter Gray in 'acknowledgement of his very valuable services in connection with the Mortality Experience Investigation'.

Personal references to membership during the period 1856-84 must be dominated by the death of the first President, John Finlaison. At its meeting on 24 April 1860, the Council received the news from his son thus:

It is with inexpressible grief that I have to convey to you the announcement of the death of my father, the President of the Institute. Oppressed with congestion of the lungs, he ceased to breathe at half-past nine in the forenoon of Friday last the 13th instant. I take this opportunity of bearing testimony that he reckoned his position at the head of the Institute of Actuaries as the chief honour of his long and useful life.

The Report presented at the Annual General Meeting of 1860 said simply:

The Office of President was tendered to that gentleman at the formation of the Institute, in accordance with the unanimously expressed wishes of its founders and was accepted by him, without hesitation, at a time when its capabilities were unknown and its success uncertain.

There is a lengthy memoir in *J.I.A.* x, 147.

Charles Jellicoe was elected President; his tremendous labours in that Office, as editor of the *Journal*, as examiner and in many other ways received acknowledgement when, in 1867, after an abortive effort to do so in 1865, he laid down his tasks:

Unanimously resolved:

That the Council in accepting the resignation of Mr Jellicoe desire to record their most hearty thanks to him for his devoted services to the Institute during the seven years he has held the office of President, and in like manner for his laborious and successful editorship of the *Journal* during the seventeen years it has been in existence.

On his death, in 1882, the Council passed the following Minute:

The President having announced to the Council that he had that day received the melancholy intelligence of the death of Mr Jellicoe the following resolution was unanimously agreed to:

‘The Council, having heard with sincere and unfeigned regret of the death of Mr Jellicoe, desire to place upon record the high esteem which they have always entertained for one who after giving his powerful assistance to the formation of the Institute of Actuaries presided over its proceedings for many years with marked ability and dignity, while contributing largely to its stability and success. For his generous and energetic support of the *Journal* of the Institute, the Society, and the Profession at large owe him a deep debt of gratitude. Endowed with abilities of no common order, possessed of great tact, courtesy and judgement in combination with the most unswerving integrity, Mr Jellicoe was peculiarly fitted to discharge most ably and honourably the arduous duties which devolved upon him in the course of a long and most active professional career. The kind and unselfish manner with which he was always ready to afford help and information to his professional brethren, particularly to the younger members, endeared him to all and secured the respect and affection of those with whom he came in contact. His memory will ever be held in reverence, and by his lamented death the Institute has lost a firm

Other Notable Names

and attached friend and the Profession one of its most distinguished members. It may be truly said that he was a man whom we may well lament but can hardly hope to replace.

Other great names for mention are Prof. De Morgan who, in acknowledging election in 1857 as an Hon. Member, said that if the Institute had been a little older, Francis Baily would probably have been one of his predecessors. De Morgan died in 1871 and his widow presented to the Institute some papers drawn up by him 'giving curves showing the duration of life'.

W. S. B. Woolhouse (an original member of the Actuaries' Club, from which apparently he withdrew, though there is no actual record of his exit) became a Fellow of the Institute in 1861 and resigned in 1870, but was then made an Hon. Member. The overwhelming name of T. B. Sprague entered Institute history during these years. Elected a Fellow in 1857, he became editor of the *Journal* in 1867 and, later, he conducted therein some experiments in phonetic spelling.

A very distinguished Hon. Member, Dr William Farr, F.R.S., died in 1883.

An early connexion with the great Office from which so many and distinguished members have come—an Office unique in its later relation as landlord of the Institute's premises—is shown by the election in 1861 of Henry Harben (described as of the 'British Prudential') to be an Official Associate.

The present senior Fellow of the Institute, Hubert Ansell, worthy bearer of a famous name, was nominated a member in October 1877.

EXTERNAL RELATIONS

Contact with the Statistical Society was already close, when the latter proposed in 1856 'an arrangement with the Institute with respect to the mutual insertion of advertisements in their respective Journals'. The nature of the announcements and the decision of the Council of the Institute are not stated. Further association occurred in 1860 when the two Societies invited the foreign delegates to the International Statistical Congress in London 'to a Public Dinner'. Col. W. H. Sykes, M.P. was thanked by the Council of the Institute 'for the courteous and able manner in which he presided at the Dinner' and an attempt was made to raise £41. 9s., the Institute's

share, by private subscription among the members of the Council. Each was asked to give £1 (a reminder that the policy of 'all hands on the bridge' was still in force) but at the end, £5. 9s. had to be taken from the petty cash.

The Council considered proposed insurance legislation in 1857 and gave special attention to the Bills that emerged as the Life Assurance Companies Acts of 1870-2: suggestions were submitted to the Board of Trade. Legislation concerning Friendly Societies and married women's property also involved thought and work.

In 1872, the Board of Trade asked for the opinion of the Council on 'what are expenses' in connexion with Life Assurance business. It was resolved:

That in the opinion of the Council every expense of whatever kind, incurred by a Life Assurance Company for the purposes of promoting, carrying on, or extending the business of the Company should, with the exception of commission, be included under the head of 'Expenses of Management'.

When, however, in 1873, the Local Government Board asked for views about the treatment of parliamentary expenses incurred by a water company in protecting its interests, the Council felt unable to offer any opinion, as the matter was 'not one that falls within the province of this Institute'. The company's auditor said that the costs should be charged to revenue, while the company considered that it should be free to debit them to capital or revenue.

In 1878, it was observed that the 6th condition of 'Marsh's Periodical Sales of Reversions' had been altered so that 'if there has been a misdescription of the property necessitating an alteration in the purchase money, the amount of the compensation to be paid or received shall, if the parties do not agree upon an umpire, be determined by the President of the Institute of Actuaries for the time being, instead of by the Auctioneer as formerly'. Such a proviso still appears in the sale conditions of Messrs H. E. Foster and Cranfield, the well-known City firm of which actuaries think inevitably in matters of reversions. Mr W. H. H. Carpenter, a senior partner, has supplied the interesting information that his firm is the successor of H. E. Marsh who, in 1843, decided to hold the monthly sales that have continued ever since.

Exchanges of Publications

Cornelius Walford, in 1871, dedicated his *Insurance Cyclopaedia* to the Institute 'in conjunction with the Faculty of Actuaries in Scotland'. The Council conveyed 'the best thanks of the Institute' for the dedication—unfortunately, the work itself was never finished.

Edward Sang, in 1867, solicited the favourable opinion of the Institute on 'A Table of the Logarithms of all Numbers up to One Million' that he was preparing 'shortened to nine figures from original calculations to fifteen places of decimals'. He hoped to induce the British Government to buy the plates. The Council did 'not deem it within the province of the Institute to express an opinion collectively on the intended publication'. In 1875, however, it was agreed to support the Royal Society of Edinburgh in asking the Treasury to print at the public expense Sang's nine-place logarithm table. The Council decided, also in 1875, to republish its own four-figure logarithm card. Two thousand copies were printed for sale at 1s. each, each member being entitled to one free copy. The sum of £5 was spent on advertising the issue.

Delegates were sent to various international statistical congresses and reports were made of the proceedings. The Institute was represented also, for several years, at meetings of the British Association and, occasionally, at gatherings of other bodies.

A grant of 250 frs. ('or £10') was made in 1874 to the Memorial Fund for A. Quetelet, a leading Belgian statistician.

Publications were exchanged with, or given to, various Universities and Societies at home and abroad. In 1857, a set of the *Assurance Magazine* ' (less Vols. I and II) ' was to be forwarded—as an exchange—to the Literary and Philosophical Society of Manchester. Again, in 1872:

Took into consideration an application from the Chicago New Library for a set of the Institute *Journal* and it was decided that as many numbers as could be spared should be presented and that the volumes should be bound in boards.

An Associate in Paris suggested, in 1873, not merely exchange of the *Journal* for the *Journal des Actuaires Français*, but also the election as Fellows of some distinguished French Life Assurance managers and some prominent officials of the 'Cercle des Actuaires Français'. The

exchange was approved and it was intimated that nomination papers 'certified as prescribed by the fourth law of the Institute' would be considered. The Italian Ambassador was concerned in 1877 with the arrangement of an exchange of publications with a Royal Academy in Rome.

THE ROYAL CHARTER

From the beginning, the members of the Institute looked forward to the grant of a Charter, but for a long while nothing could be done. The Actuaries' Club was both influential and implacable, so that it cannot be doubted that any petition from the Institute would have been opposed and made void during the early years. To adapt a telling line from Charles Wesley, the Institute was 'watched by the Club's malignant eye'. Reference has been made, in Chapter III, to the abortive Bill for regulating the profession and practice of actuaries throughout Great Britain and Ireland. In April 1853, at special general meetings of the members of the Institute, held with regard to the Select Committee of the House of Commons on Assurance Associations and the Act of 1844, three resolutions were passed, one of which was as follows:

That, in the opinion of this Meeting, no legislation on Life Assurance Associations can be permanently effective that does not exact tests as to the respectability and acquirements of persons allowed to practise as Actuaries.

The report of the Select Committee is given verbatim (*J.I.A.* IV, 31) and attention is called by the editor (Chas. Jellicoe) to the last paragraph of the report, which ran as follows:

Your Committee will conclude their Report by calling attention to a part of the evidence which advocates the formation of an incorporated Society of Actuaries, with a view to the advancement of that [*sic*] important science, and also with a view to issue diplomas or certificates to persons qualified to practise as Actuaries. If any effort should be made to induce Parliament to grant such an incorporation, the Committee are of opinion that it will be worthy of consideration; but that further investigation would be needful before such measures should be adopted, as considerable difference of opinion prevails on the subject among Actuaries themselves.

The Long Penalty of Disunion

To this paragraph, the editor appended the following footnote:

We shall take an early opportunity to draw the attention of our readers to the evidence which has given rise to this remark, and to examine dispassionately the views and objects of the persons giving it. The opposition to such a measure, of members of the profession, would appear to most persons, having its real interests at heart, to be nothing other than suicidal. The object of opponents, out of it, we can perfectly well understand.

The writer of the article (*J.I.A.* xxv, 1) on the grant of the Royal Charter said:

On at least two occasions since that Report of the Select Committee, the difficulty as to who is and who is not to be considered an actuary for the purposes of legislation has been conspicuous, namely, in connexion with the Life Assurance Companies' Act 1870, and the Friendly Societies' Act 1875; and on each occasion no attempt was made by the Legislature to remove that difficulty, mainly from the reason hinted at in the paragraph of the Report of the Select Committee just quoted, that 'considerable difference of opinion prevailed [*sic*] on the subject of the incorporation of the Institute among actuaries themselves'. To those of our readers who are familiar with the early history of the Institute of Actuaries, the words just quoted indicate a state of affairs which now happily no longer exists.

In Scotland, there was no such difficulty and, on 21 September 1868, the Faculty of Actuaries was granted a Royal Charter of Incorporation. The daughter had achieved in 12 years what the mother had not obtained in 20 years and was not destined to secure for another 16 years.

Probably, it was because of the Scottish success that, in October 1868, the Council resolved:

That it be referred to the Legal and Parliamentary Committee to consider whether it is desirable that the Institute should possess a Charter, and if so, what steps should be taken to obtain one.

The Committee reported in the following month that 'it would not at present be expedient to take steps in the matter'.

The next references come in the Spring of 1870, when the issue was raised in a different form. The Council

resolved that a Committee be appointed to confer with the Members of the Actuaries' Club and with the Faculty of Actuaries of Scotland with

The Institute of Actuaries, 1848–1948

a view of forming a new Institution or College which shall include the qualified members of the profession, and to take steps to secure the recognition of such body by Parliament.

A strong Committee was appointed, which became known as the 'College of Actuaries' Committee and chose a Sub-Committee 'to confer with the Faculty of Actuaries and the Actuaries' Club on the question'. It was decided also to try to secure an amendment to the Life Assurance Companies Bill to the effect that 'the term Actuary shall be taken to mean the officer appointed by the Company to make the periodical valuations, provided that any such officer appointed after the passing of this Act shall have obtained the Certificate of Competency of the Institute of Actuaries of Great Britain and Ireland or of the Faculty of Actuaries in Scotland'. Naturally, this last suggestion was opposed by the Club, which decided to call attention to the fact that 'the majority of Actuaries of leading Offices are not Fellows of the Institute'. The Club did agree that a few members of the Institute should be invited to confer with some of the members of the Club 'at an early opportunity' on the question of a College of Actuaries. A meeting was held and it was decided that no steps be taken at present. 'Several gentlemen however expressed themselves in favour of either materially extending the Club or of establishing some other Association which should include the members of the Club and the Actuaries of other leading Offices which are not now represented at it'. The emphasis on leading Offices will be noted. There is in the archives of the Actuaries' Club a four-page printed paper, marked in pencil 'Date about 1870', which was prepared, possibly, in connexion with the movement by the Institute. The paper begins with mention of the three Associations of Actuaries in the United Kingdom, namely:

THE ACTUARIES' CLUB: The members of which have always been elected exclusively from the Actuaries of the older Life Assurance Companies in London.

THE INSTITUTE OF ACTUARIES: Divided into two 'bodies'—Fellows and Associates. The Fellows are said to include many Actuaries, Secretaries and Managers of Assurance Societies, but are not confined to the profession of Actuary. The Associates are stated to embrace many persons not engaged in the business of Life Assurance at all, with others that are so engaged, including a few Actuaries.

A Pamphlet (c.1870) of the Actuaries' Club

THE FACULTY OF ACTUARIES IN SCOTLAND: Said to be composed of the Actuaries and Managers of the Scottish Life Insurance Companies.

The pamphlet proceeds to an analysis:

Of Life Assurance Companies having Head Offices in London, 26 have been established 35 years and upwards and are represented by their Actuaries, or not represented, thus:

At the Club	14
At the Institute	9
At neither	<u>3</u>
	26

In addition, there are about 51 Life Offices in London of more recent establishment, 'none of which are represented by their Actuaries at the Club'. About 27 are represented by their Actuaries (or, if they have no Actuary, by their Secretary) at the Institute. About 24 are not represented at 'Club' or Institute.

There is a final note:

No member of the Actuaries' Club has ever been connected with any unsound Office or with any Office which has wound up its business.

No record has been found in London, or in Edinburgh, of any subsequent meeting of the 'College of Actuaries' Committee or of any conference with the Faculty of Actuaries.

The Club did not relapse at once into quietude. In December 1870, it was proposed to consider the advisability of 'altering the designation of the Club'. The only change made was to add, with probably unperceived significance, 'Anno Domini 1848'. Two years later, there was a discussion on 'the desirability or otherwise of endeavouring to extend the sphere of usefulness of the Club and the means best adapted for that purpose'. The majority did not think it proper to alter 'the practice hitherto pursued in estimating the qualifications necessary for admission to the Club'. No new members were elected during the years 1879-84. A report of a Committee in 1873 on various matters called attention to a resolution of 4 June 1858 limiting the number of members to twenty and 'to the practice of the Club hitherto not to elect as a member anyone who is a member of the Institute of Actuaries'. It was suggested by the Committee that, while the limit be kept, 'actuaries shall be eligible

as members of the Club whether they are members of the Institute or not'. This resolution was not accepted by the Club. Again, in April 1882, it was proposed to increase the limit to forty members, the Club to 'embrace any actuary of good reputation representing a sound Office'. Opinion varied and an alternative was put forward in May that the Actuaries might be introduced of some Offices (named, but not recorded) 'irrespective of their being members of the Institute of Actuaries'.

Thus matters stood with the Club during the period 1870-82: the records of the Council of the Institute are silent.

The real effort by the Institute is shown to have begun, when, in April 1882, William Sutton gave notice of intention to bring up at the May Council Meeting the question of a Charter. It was then

Resolved that in the opinion of the Council it is desirable that the Institute of Actuaries be incorporated by Royal Charter and that the necessary measures be taken to obtain such Charter with as little delay as circumstances will permit. Resolved that a special Committee be appointed for the object stated in the foregoing resolution, and that the Committee be authorized to employ such legal and other assistance as may be necessary, and to summon a special Council whenever they may consider it advisable to do so.

At the Annual Meeting of the Institute on 3 June, the President moved and it was agreed unanimously:

That this meeting approves the recommendation of the Council in reference to a Charter of Incorporation for the Institute, and requests the Council to take the necessary steps towards obtaining such Charter.

In the account that follows of the tortuous and delicate proceedings, much has been drawn from a very long memorandum submitted to the Council by William Sutton (the principal worker in this cause) and ordered to be entered on the Minutes, of which it takes up nearly fifty large pages.

The appointed Committee, largely guided by Sutton, prepared the draft Petition and Charter and, by July 1882, the Council was able to authorize three members to settle the draft with Mr Markby, of Messrs Markby, Stewart and Co., 57, Coleman Street (then, as still, the Institute's solicitors). The petition was to be signed by the President and Vice-Presidents. All this being done, it was agreed in

The Institute's Petition opposed

October 1882 to inform the Actuaries' Club and to ask 'whether the members are willing to join the Institute'.

Meanwhile, the Club had heard of the project and, in July, had held a discussion. The points are summarized in its Minutes under the headings 'Adverse Opinions' and 'Favourable Views'. In brief, these were respectively:

Adverse Opinions:

1. Many leading Offices not connected with the Institute.
2. The benefits held out to those passing Institute examinations 'could but rarely be obtained'. The Institute had 126 Fellows and 231 Associates and the Faculty, 72 Fellows and 9 Associates, yet vacancies in Actuaryships were 'not at all frequent' and 'the legal fees obtained by Actuaries were not of any large amount'.
3. More was required of an Actuary than merely passing examinations and it was not judicious to limit the Directors of a Life Office to a choice only from among Fellows of the Institute.
4. If the Offices were 'absorbed into the Institute', they might lose their freedom of action.
5. Other Societies were not incorporated.
6. The application for a Charter might be successfully resisted.

Favourable Views:

1. The Institute was justified in its petition.
2. Without doubt, the Institute would be ready to admit the members of the Club as Fellows.
3. If so, the Club need not be discontinued.
4. It was questionable whether opposition would succeed.

On 27 July 1882, the Club wrote to the Clerk of the Privy Council Office and to the Secretary of the Board of Trade setting forth its views. Emphasis was laid on the Club's comprising the Actuaries 'of some of the very oldest and soundest Life Offices' and on its being 'entirely distinct' from the Institute. The membership was stated as being fifteen and details were given of the Offices represented, of their total funds, premium and interest income and claims paid 'last year'. The letter ended thus:

On the ground, therefore, that the Institute of Actuaries does not include the Actuaries who compose the Actuaries' Club, and that the majority of the Fellows, and four-fifths of the members, of the Institute are not Actuaries of Life Offices, the members of the Actuaries' Club are of

opinion that the status which the Institute of Actuaries might acquire, if it were incorporated, would be not only inequitable to the position of the members of the Actuaries' Club, but also misleading to the public.

T. B. Sprague, as President of the Institute, called, in October, on the Treasurer of the Club and expressed regret at the delay in giving information of the project for the Charter. He intimated that the Institute knew of the Club's letter to the Board of Trade and put forward a proposal whereby non-practising members of the Club would be made Hon. Members of the Institute and the others, Fellows. The Club decided to continue to oppose.

In December 1882, the Board of Trade wrote to the Institute asking for the petition to be advertised in the *London Gazette* and some London newspaper and for observations on the Club's letter of 27 July. The Board informed the Club. A very long reply was submitted by the Institute, of which the main points, here partly summarized and partly quoted, were:

1. The Institute's objects: 'the improvement of the profession—by providing a system of professional training and examinations', with grant of certificates of competency—also by collecting and publishing theoretical and practical information.

A Royal Charter 'would enable the Institute to extend its sphere of usefulness, greatly to the public advantage'.

2, 3. The Actuaries' Club: 'Soon after the establishment of the Institute, some gentlemen holding appointments as Actuaries of Life Assurance Offices, who disapproved of some of its objects—in particular it is believed the throwing the Institute open to members of the profession other than those holding appointments as Actuaries of Life Assurance Offices, and the giving assistance to young men to qualify themselves as Actuaries—formed themselves into a private society under the name of the Actuaries' Club, limited as to numbers, and confined to those holding or having held appointments, as Actuaries of Life Assurance Offices.

The objects of the Actuaries' Club are not known to the Council of the Institute, no information on the subject being accessible, but it is a fact that no publication either of value or interest to the profession has emanated from the Actuaries' Club during the thirty-four years of its existence, nor is there any evidence to show that it has rendered assistance to young men endeavouring to qualify themselves as Actuaries. On the other hand, the advantages offered by the Institute have been fully recognized by young men connected with Life Assurance Offices of which members of the Club

The Institute's Rejoinder

are or have been Actuaries, and even by the sons or other relatives of members of the Actuaries' Club; and in several instances the gentlemen who have succeeded to the appointments formerly held by members of the Club are members of the Institute, and have through this medium acquired their actuarial knowledge and improved their professional status.

There is good reason to believe that membership of the Institute of Actuaries constitutes a disqualification for membership of the Actuaries' Club; but from time to time, since 1848, endeavours have been made to induce the members of the Actuaries' Club to join the Institute. To the regret of the Council of the Institute, who have always desired to unite the whole profession in one common body, these endeavours have hitherto failed, the last occasion being some two months ago in connexion with the application of the Institute for the grant of a Royal Charter of Incorporation.

4. The aim of the application is 'to secure, in the interests of the public, that there shall in the future be a trustworthy and readily available standard of professional competency'.

The position of members of the Actuaries' Club was safeguarded by Clause 21 of the Draft Charter. In order, however, to give the members of the Actuaries' Club an opportunity of availing themselves of any advantages which may arise from the grant to the Institute of a Royal Charter of Incorporation, the Council of the Institute would propose that the following words be added to Clause No. 21, viz.:

Provided nevertheless that the persons who at the date of this Our Charter are members of the collective body established in the year 1848 under the name of the Actuaries' Club shall severally become Members and be and be styled Fellows of the Institute upon their severally giving notice in writing of such being their desire delivered to the Council before the expiration of the said term of five years.

The letter went on to describe the Club's statistics (as to Funds, etc.) as 'even if correct, entirely irrelevant' and the final paragraph was:

The Institute of Actuaries has never been restricted to those holding appointments as Actuaries of Life Assurance Offices. Its first President was the late Mr John Finlaison, Actuary of the National Debt Office, and at the present time it includes among its members, it is believed, all the Actuaries in the service of the various departments of the State (viz.: National Debt Office, Friendly Societies' Office, India Office, War Office, and Board of Trade), besides other Actuaries not attached to Life Assurance Offices, and a large number of young men who are making use of its advantages to qualify themselves hereafter as Actuaries.

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The Club renewed its objections in a letter of 8 February 1883 to the Board of Trade, which is believed, not long afterwards, to have reported adversely to the Privy Council.

For some unstated reason, perhaps to give the Institute a last chance, the Board wrote in April 1883 asking whether the Institute had any further remarks to offer on the Club's letter of 27 July 1882. This challenge produced within the month a terrifying result in the shape of a letter that occupies nearly 12 pages in the Minute Book. With the letter were sent three specimen volumes of the *Journal*, copies of Mortality Tables prepared by the Institute, a copy of the text-book 'as far as published' and the Examination Syllabus with the papers of the year.

The letter itself contained the following table of examination results (for all parts combined):

Years	No. of candidates examined	No. successful
1850-9 (10 years)	133	113
1860-9 (")	214	104
1870-9 (")	346	131
1880-2 (3 ")	111	57
TOTALS	804	405

It was stated that, frequently, members of the Faculty took the Institute's examinations, which were held in Edinburgh for their convenience.

Then followed, with obviously unintentional omission of reference to the influence of the Faculty:

It might almost be asserted that every one of the leading actuaries of the next generation will be found to have passed through the curriculum of the Institute, and to a very large proportion of the existing generation of leading actuaries the same remark would apply.

The next point was the great need for a recognized standard of actuarial competency, with special reference to the position of thousands of Friendly Societies. The view was taken that 'the passing of the Institute examinations is satisfactory evidence of actuarial competency'. Emphasis was laid also on the Institute's being open to all 'who were willing to comply with the conditions of membership'.

The Institute's Second Statement

With regard to the objections of the Actuaries' Club, the letter made some very definite assertions:

1. The Actuaries' Club almost, if not entirely, had its origin in the objection its members had to the main object of the Institute of Actuaries, viz.: to educate its younger members in the principles and practice of the actuarial profession by the means already enumerated.

2. The Actuaries' Club is limited in number to twenty actuaries, who must be in addition Actuaries of Life Offices. Now we would observe there is no more necessary connexion between Actuaries and Life Offices than there is between Engineers and Railways or between Medical men and Hospitals.

This second point was emphasized by referring to distinguished past and present members of the Institute, including John Finlaison and Dr Farr, whom the rules of the Club would shut out. The overseas membership of the Institute was mentioned.

3. The Actuaries' Club is a body which may be described as undergoing the process of natural decay. Its numbers, although limited to twenty, have been gradually dwindling for many years and it has not, it is believed, had a new member join (certainly not more than one) for some twelve years past; and from the nature of its constitution, coupled with the fact that the actual or probable successors in office of the present members are in many instances members of the Institute of Actuaries, it must in comparatively a few years cease to exist.

4. The Actuaries' Club is not known to have ever done anything for the actuarial profession at large, either in the way of publication or education, and cannot be considered as in any way entitled to speak for actuaries as a professional body.

The writers then dealt with the Club's argument that most of the members of the Institute could not hope to become actuaries of Life Offices:

It might just as well be urged that the majority of the Fellows and four-fifths of the members of the Royal College of Surgeons are not the chief medical officers of hospitals, or that the three to four thousand members of the Institution of Civil Engineers do not all hold principal engineering appointments. The Institute has always been solicitous to have among its members not only those holding leading official appointments but also subordinates and in the nature of things ultimate successors, at the same time doing all that lies in its power to secure that these subordinates and ultimate successors shall by availing themselves of the educational advantages

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afforded by the Institute prove at least equal if not superior to their predecessors in professional acquirements.

It follows therefore that among the four-fifths of its members who are not actuaries of life offices are included not only those actuaries holding important Government or other appointments and those in practice on their own account but also the future successors, probably for the next two generations, of the remaining one-fifth.

This was reinforced by reference to the position in the Faculty of Actuaries in 1868.

After the remark 'it may with propriety be suggested as doubtful whether the very name even of the Actuaries' Club is known to the public', the letter concluded with a reiteration of the Institute's offer of its Fellowship to the members of the Club.

Nothing appears in the Report of the Council for the year 1882-3, but it is known (*Insurance Record*, 8 June 1883, quoted in the Minutes of the Actuaries' Club) that some reference to opposition to the Charter was made by the President at the Annual Meeting of the Institute in June 1883. T. B. Sprague, in his Presidential Address of 27 November 1882, touched upon the subject and, after some friendly words about the Faculty of Actuaries (union with which he thought not very difficult of attainment) he spoke plainly about the Club:

The case is unfortunately quite different as regards the Actuaries' Club, who still hold aloof from us, and not only reject all overtures for a union of the two bodies, but will not, I believe, allow individual members of the Club to belong to the Institute. From the nature of the case, the Club was never an increasing body; for no young man could obtain admission to it until he had got an appointment as actuary of a life office. The Club therefore for many years remained stationary while the Institute was rapidly advancing, and it is now retrograding; for young men who have been welcomed into the Institute as students, will not leave it when they get appointments as actuaries. At the present time the Club consists of the actuaries of 12 of the oldest Life Offices, and 3 retired actuaries.

There is no doubt, I believe, that the opposition of the Club was instrumental in past years in preventing the Institute from obtaining the public recognition at which its founders aimed. So long as a relatively important section of the profession held aloof, and it was doubtful whether the Institute would secure a permanent position for itself, it was quite reasonable that hesitation should be felt by the authorities before recognizing it as the representative of the profession. This result has probably,

The Board of Trade's favourable decision

on the whole, been beneficial to the Institute. It has been left for a period of thirty-four years to develop itself without any external aid or encouragement, and it has now attained a high and influential position, which is the natural result of the work which it has done for a long series of years.

After the Board of Trade's report, the Privy Council, at a date unknown, consulted the Treasury, which also advised against the grant of a Charter, so that it appeared to be inevitable that the petition would fail. William Sutton, however, was able to arrange for the decision to be deferred—his account goes on:

With matters in this position, it was evident that exceptional measures would have to be taken to contend with and overcome the remarkable and almost inexplicable influence exercised by the opposition of the Actuaries' Club.

Sutton prepared a short memorandum of which nine copies (none is known to be extant) were circulated in influential quarters and strong private efforts were made in the last months of 1883 and the early part of 1884 to induce the Board of Trade to reconsider its attitude. On 26 December 1883 *The Times* published an article on 'Friendly Society Finance' and made direct reference to the Institute and its educational work. Sutton does not say who wrote or inspired the article, but something may be inferred from the quiet next sentence, which begins: 'In carrying out these endeavours' and mentions the great help afforded by certain members of the Institute. To them, as to some non-members (including Childers, the Chancellor of the Exchequer), he pays warm tribute at the end of his report.

All these efforts bore fruit when, in February 1884, the Board of Trade stated that it was 'now disposed to report favourably to the Privy Council Office'. But the Board inquired what the Institute would do to meet the wishes of the Club, as expressed in a letter of 14 February sent to the Board. This letter maintained the Club's position, but indicated knowledge that its battle was lost, for the following claim was made:

If, nevertheless, the Board of Trade should reject the opinion of the Actuaries' Club, and advise the grant of a Charter to the Institute of Actuaries, it is considered by the Actuaries' Club that all the present Members should be scheduled in the Charter as entitled to the privileges to be obtained under such Charter in the same way as if they were Members of the Institute of Actuaries.

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The Institute responded at once by agreeing to the Club's request, if it could be carried into effect. Grave doubt was expressed of its being possible to provide by the Charter for persons who would not become members of the corporate body. So, in the letter of 3 March 1884, alternative offers were made by which all present members of the Club would become (either at the outset or at any time later) Fellows of the Institute 'under and by virtue of the Charter' and would have all privileges, including treatment as persons who had compounded their subscriptions.

In response, the Club made another attempt to prevent the impending grant, by writing to the Board of Trade a letter in which it was alleged that a Charter would undermine the position of Directors of Life Assurance Offices:

The Directors of these Institutions consist of more than 3,000 men, more or less eminent, who have been chosen by, or on behalf of, the provident classes of this country to protect their interests; they have been chosen generally from the Merchants, Bankers, Manufacturers, and professional classes, and include in their number many Members of Parliament.

To this body has been intrusted funds, now represented by some £150,000,000 sterling, with future liabilities amounting to upwards of £400,000,000 and the Actuaries' Club, on public grounds, do not deem it right that any step should be taken behind the backs of these gentlemen, and therefore, without their knowledge and approval, which would, in effect, by creating a monopoly, deprive them of the free exercise of their choice.

Perhaps by inadvertence, this letter was written by the treasurer of the Club from the 'Sun Fire Assurance Society'; his previous communication was headed 'Sun Life Assurance Society'.

The Board of Trade informed the Club on 22 March 1884 that it had 'this day advised the Privy Council Office in favour of a Grant of a Royal Charter of Incorporation to the Institute of Actuaries'. Thereupon, the Club sent a print of all the correspondence since its letter of 27 July 1882 to the Privy Council and renewed the demand, on behalf of the members of the Club, for the privileges of the Charter 'but without requiring them to become Fellows of the Institute of Actuaries'. This clearly impossible provision led to further correspondence. Also, of course, the adverse opinion of the Treasury remained to be considered. Moreover, the struggle was carried into

The Grant of the Charter

Parliament and the Press. An obliquely worded question about the way in which the Board of Trade dealt with applications for Charters was answered in the House of Commons by Joseph Chamberlain. Several references to the Institute's petition appeared in *The Standard*, anonymous letters suggesting that the Institute ought to 'exist merely on its merits', that 'protected by a Charter it is as likely to degenerate as not' and that it would be able to constitute itself 'an exclusive Trade Union'.

On 9 June 1884, the Club, 'after much deliberation', decided to write to the Institute thus:

I am desired to acknowledge the receipt of your letter of the 17th ulto. and to inform you that if the Actuaries' Club clearly understand from your letter that it has been decided by the Privy Council that it will recommend Her Majesty to grant a Charter of Incorporation to the Institute of Actuaries, and that the objections made by the Actuaries' Club are practically disregarded, the Actuaries' Club have now decided to accept, as the least inconsistent with their views, the first of the two alternatives, mentioned in your letter of the 3rd March last...

The step now taken by the Actuaries' Club must be distinctly understood as not implying that they in any way depart from the conclusions they expressed as to the undesirability, in their opinion, of a Charter, either in the interests of the Actuarial Profession or of those of the public generally.

Eventually, all obstacles were passed and on 29 July 1884 Her Majesty in Council granted the Charter.

On 14 August, *The Times* recorded the event in an article of which the last two paragraphs are reproduced:

It appears from the Charter that the members of a select body of Actuaries, known in the profession as the Actuaries' Club are by the Charter made Fellows of the Institute; thus practically joining all the members of the profession in the Corporate body which will in future consist of Fellows and Associates heretofore, with a new class called Students. Fellows and Associates are in future to become such by examination, except in certain special cases where the Council thinks fit to dispense with examinations.

The Institute had its rise among the officials of the large Life Offices of the Country, although curiously enough the famous Actuary of the National Debt Office, the late Mr John Finlaison, was its first President, and naturally the Institute has been mainly supported and carried on by those connected with the life insurance system of the Country. Of late,

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however, actuaries have had a largely extended field of operation. The large Government Departments, Municipal Corporations, Service Funds, and lastly the Friendly Society system, all require actuarial advice and assistance from time to time and indeed the skilled actuary has been more than once of late years defined to be a scientific financier. It has thus come about that the Institute of Actuaries has become the alma mater of the actuarial profession, and it may be safely said that judging from its past history, it will in the future, with the additional advantages likely to accrue from having a Charter of incorporation, faithfully and efficiently continue to carry out, in the interests of the community at large, the objects with which it was established.

Although the opposition of the Actuaries' Club was strong, persistent and even embittered, there were fine elements of genuine concern for and pathetic loyalty to an earlier and a limited professional conception. It may be also that the long-continued struggle was carried on through the insistence of a very few, the remaining members tolerating the action in the interests of their old association. When the copies of the grant were sent to the Club, it was decided that 'an acknowledgement of the receipt of a Copy of the Charter sent to the members should be made by the members individually and not by the Club collectively'.

'At the same time, it was considered well that some recognition of the new position of the Club should be taken' and it was resolved 'that the Actuaries' Club do invite the President, the Vice-Presidents, the Hon. Treasurer and the Hon. Secretaries of the Institute of Actuaries to dine with them at the Albion on Thursday, the 20th prox. at 6 o'clock'. Unfortunately, the President of the Institute, T. B. Sprague, was away in Scotland and one other of the intended guests was ill, but three Vice-Presidents, the Treasurer and the two Hon. Secretaries were present on 20 November 1884. Also, the President of the Institute of Actuaries' Club came by invitation, doubtless in part because members of the Actuaries' Club (to the number of ten) had been guests at a dinner of the other Club on 11 November in Willis's Rooms.

The 'Institute' Club was founded in 1855 and amalgamated with the Actuaries' Club in 1899.

The spirit of these times is exemplified further by a testimonial accorded in July 1885 to the Treasurer of the Club, reference being

Reconciliation

made to 'the admirable manner in which he had conducted the correspondence with the Government Departments on the occasion of the Grant of a Charter to the Institute of Actuaries and to the members of the Actuaries' Club'.

J. A. Higham, who had resigned his Fellowship in 1851, made an individual gesture of reconciliation when, in April 1882 and February 1883, he read papers before the Institute. He was described (*J.I.A.* xxiii, 335 and xxiv, 44) as 'Member of the Actuaries' Club' and, in the discussion on the earlier paper, was welcomed for 'again taking part in the proceedings of the Institute'. Higham, like his son, C. D. Higham, was a man of strongly individual view, as he showed by insisting on paying his subscription even though it was an express provision of the Charter that it was deemed to have been compounded.

The paper in the *Journal* immediately following the Charter is by J. A. Higham, now described finally and appropriately as 'Fellow of the Institute of Actuaries'.

The Council of the Institute arranged that some members of the Club should receive appointment to Offices in the Institute and the Club itself went on, not merely, as still it is, Senior Club of the Profession, but even for a time as a body consulted by the Board of Trade.

Perhaps it may serve as a summary of the final attitude of the more recalcitrant members of the Club to recall the story of the Scottish Elder who, on giving way at last over a minor project for the reunion of two dissident Church organizations, is said to have exclaimed: 'It is stupid, it is sinful, but it is the Will of God.'

CHAPTER V

THE INSTITUTE OF ACTUARIES, 1884-1914

The terms of the Charter and the Bye-Laws—The constitution and operation of the Council—Premises and staff—Meetings and Members—External relations—Miscellaneous matters

In this chapter, it is proposed to deal with the terms of the Charter and to refer to the Bye-Laws, as well as to record the general history of the Institute during the period that ended with the outbreak of the War of 1914-19. In large part, it is an epoch within the memory of a considerable number of present members and among its notable domestic features there are, particularly, the coming of the Institute to Staple Inn and the advent of S. H. Jarvis.

The sub-headings vary somewhat from those used in other Chapters and the spreading activity of the Institute has made necessary the exercise of an often difficult choice of the section in which an occurrence should be mentioned.

THE TERMS OF THE CHARTER AND THE BYE-LAWS

The Charter of 29 July 1884, which still governs the operation of the Institute, is reproduced in *J.I.A.* xxv, 5 and in certain issues of the *Year Book*. What was said of it by those best qualified to judge, in the first flush of pleasure at the Institute's success? T. B. Sprague began his third Presidential Address on 24 November 1884 thus:

Gentlemen, since we last met, a most important event has occurred in the history of our Institute. The object at which we have been aiming for more than two years, has at last been happily attained. A Royal Charter has been granted to the Institute of Actuaries, and our profession now takes its proper position before the public, as a united and officially accredited body. As our first president, the venerable Government Actuary, John Finlaison, pointed out at the foundation of the Institute, it is very many years since the profession of an actuary was recognized in Acts of Parliament; but hitherto the public have had no means of ascertaining who

The Charter—President's Address

was entitled to be called an actuary. This will now no longer be the case; but the rule may be distinctly laid down, that an actuary is a Fellow of the Institute of Actuaries, or a Fellow of the Faculty of Actuaries in Scotland, and that no other person can properly take to himself the title. This would not have been the case, but for the fact that the important section of the profession, which for many years kept aloof from us, have now joined us in a body. This is, in my opinion, an event on which both the Institute and the Actuaries' Club are to be congratulated; and I do not doubt that the union thus accomplished will prove advantageous in various ways to all parties concerned.

By the grant of a Charter, a fundamental change has been made in the character and constitution of the Institute. It is no longer a private scientific society, composed of gentlemen associated together for the purpose of promoting the study of the theory of life insurance; but it is now a professional body, publicly recognized as representing and entitled to speak in the name of the actuaries of the United Kingdom. It is impossible at present to say exactly what duties will devolve upon it in consequence of this change in its constitution—what steps may hereafter be taken, to enable it to protect the public from being preyed upon by unqualified men professing to be actuaries, or to exercise discipline over members of the profession. I am sure, however, I shall have the sympathy of all the members, when I express the hope that, whatever new duties may devolve upon the Institute, these will be found to be not inconsistent with the continued discharge of the useful functions with which its name has been so long connected.

He considered it undesirable to speculate upon the probable future of the Institute because any public expression of opinion might 'inconveniently hamper the deliberations of the Committee which has been charged with the preparation of the new Bye-Laws'.

'A fundamental change has been made in the character of the Institute'—thus Sprague—and it is easy to appreciate what he meant. Nevertheless, it must be urged that the Institute of Actuaries was substantially the Institute of 1848, confirmed, developed, incorporate, but the obvious successor of the former society.

The Charter begins with various recitals, including the three objects for which the Institute of 1848 was established and emphasizing the educational and other work already organized and accomplished. Then follow the actual words of incorporation and forty-six short Articles, setting out the broad plan of the Institute's future constitu-

tion and governance. The first Council and Officers are named and the Council is ordered to meet 'at Adelphi Terrace in the City of Westminster at 5 o'clock in the afternoon on the second Tuesday after the date of this Our Charter'. Draft Bye-Laws are to be prepared and sent to each member of the Institute within 10 months, and the General Meeting for adopting the Bye-Laws is to be held not less than 13 or more than 15 months, after the date of the Charter. The Bye-Laws are not to have effect until they have been allowed by the Privy Council.

Five classes of members are recognized: Fellows, Associates, Students (a new category), Honorary Members and Corresponding Members:

After 5 years from the date of the Charter every new Fellow (whether an Associate or not) must pass the prescribed Examination or Examinations, such 'Examination or Examinations being exceptionally dispensed with by the Council if it think fit in such cases, on such conditions and in such manner as Bye-Laws prescribe'. There is a similar provision as regards Associates, but the interim period is 3 years.

The minimum age for a Fellow is stated as 21 years.

Admission to the class of Fellow or Associate during the interim period is to be 'on such conditions as Bye-Laws prescribe'.

The essential qualifications for new Honorary Members and new Corresponding Members are indicated thus:

An Honorary Member: A person who 'by reason either of his position or of his eminence in science and his experience in matters relating to the profession of an Actuary appears to the Council to be able to render assistance in promoting the objects of the Institute and who is not professionally engaged in practice as an Actuary'.

A Corresponding Member: A person 'who is resident out of the United Kingdom and who is professionally engaged in practice as an Actuary and appears to the Council to be able to render assistance in promoting the objects of the Institute'.

Students are to have such qualifications and to be admitted on such conditions as Bye-Laws prescribe.

The use of the initials 'F.I.A.' and 'A.I.A.' is sanctioned and the rights of the various classes of members are indicated.

Preparation of the Bye-Laws

In August 1884, at a Council Meeting, 'the Charter was presented and taken as read'. The fees 'for obtaining the Charter' were reported as having been £165. 13s. 6d. and the solicitors' bill of £142. 10s. was ordered to be paid. Two months later, a special Bye-Laws Committee was appointed and, meanwhile, applications for commutation of subscriptions and, in some cases, for membership were ordered to stand over. The indefatigable Sutton agreed 'to prepare a rough draft for revision and settlement' by the Bye-Laws Committee, which met for the purpose at least eight times and considered the draft 'line by line'. Sutton's draft formed the basis of that which was ultimately adopted by the Committee. It was felt that the Council should be asked to decide 'whether the preliminary draft should provide that future Bye-Laws should be settled with the concurrence of the future Associates of the Institute in accordance with the views of their majority or that such future Associates should be debarred from voting for the enactment or alteration of Bye-Laws'. The Council resolved that the draft Bye-Laws as printed 'be circulated among the members, together with a suitable circular' and 'that the fifteenth day of April 1885 be the latest day for receiving the observations of members'. Various replies were received from members and considered by the Committee, which referred particularly to a suggestion that 'an official Register should be substituted for the annual publication of the list of members'. The Committee did not think it advisable to alter the proposed Bye-Law but recommended nevertheless 'that such a Register should be ordered by the Council to be kept'.

As an interim measure, the Hon. Secretaries were given power, in May 1885, 'to insert the names of those passing the Final Examination, if requested so to do, as Fellows in the forthcoming list of members'. In October 1885, the Bye-Laws Committee was re-appointed with an enlarged membership 'to prepare Nomination and other forms, also the Rules and Syllabus of Examinations and to select a design and get a corporate seal made'. It was agreed also that actual nominations be not considered until the Bye-Laws had been approved by the Privy Council, but that 'those who wish to become students and attend the Institute classes may do so on depositing the amount of the fees'.

The Common Seal of the Institute was ordered on 9 February 1886 to be affixed to the Bye-Laws as amended and prepared for

final approval by the Lords of the Privy Council who, on 26 February, were 'pleased to allow the same'. The Bye-Laws are printed in *J.I.A.* xxvi, 229 with the following preface, prepared by a Select Committee:

THE POSITION OF THE PROFESSION UNDER THE CHARTER

The Council of the Institute of Actuaries, in appending a copy of the Bye-Laws, as allowed by the Lords of the Privy Council, think it desirable to make some observations in connexion with the important changes which have lately taken place in the constitution of the Institute.

By the grant of a Royal Charter of Incorporation the Institute has become a Public Body, and its Members have acquired a higher professional status than they formerly could claim. They will, as members of that Body, be called upon to discharge many important professional duties, both of a private and public nature, and it will be incumbent upon them at all times to bear in mind that they are acting not merely as private individuals, but as Members of a publicly recognized Profession, whose reputation is more or less in their hands. Particularly will this be necessary when Members of the Institute are consulted in reference to the affairs of public companies transacting assurance business, and other institutions of a like character, where there may arise a conflict of interests as between the company or institution and the assured, or a possibility that actuarial reports, statements, opinions, valuation balance sheets, and the like may be publicly advertised or circulated, or otherwise made use of, in a manner likely to mislead or confuse the public mind.

Under its old constitution, the Institute did not interfere with its Members in the honourable exercise of their profession, nor has it the power to do so under its new constitution, which is in this respect similar to that of other chartered professional bodies.

The Council, therefore, confidently rely upon every Member so exercising his profession as to maintain and, if possible, add to the public reputation of the Institute as a professional body whose Members are jealous both for their own honour and for the reputation of the Institute.

Wooden blocks of the Seal for the use of the Library, etc. were ordered to be obtained by the Hon. Secretaries. Provision was made for the keys of the padlocks securing the Seal to be distributed thus:

One set to be deposited at the London and Westminster Bank, Temple Bar Branch, to be delivered up only upon the production of a copy of a Minute passed by the Council and signed by the President for the time

The Seal

being, and the other set to remain, one in the custody of the President and the other in that of the Senior Honorary Secretary.

Custody of a key of the Seal remains all that a President could show as external evidence of office—not for him an ‘Institutional’ chain, despite unavailing later effort by a prospective benefactor, nor even ‘some few leaves of wild olive, cool to the tired brow, through a few years of peace’—just a key, precariously kept and occasionally forgotten.

Sutton submitted to the Council a lengthy further report, entered in the Minutes, on the proceedings in connexion with the Charter and Bye-Laws. A. J. Finlaison prepared a copy with forms and index: it was resolved that he be thanked and ‘that a bound copy be supplied to each member of the Council and a copy in paper cover to each of the remaining members of the Institute—free of charge’.

In December 1886, it was considered necessary to order the Seal to be returned to the suppliers ‘for the erasure of their names therefrom’. The origin and meaning of the design, substantially* reproduced on the title-page of this book, were explained, with characteristic length of word and passage, by T. E. Young in April 1925 in a letter to S. H. Jarvis, of which extracts reading in one piece are appended:

The figures—now that I examine them—are rather odd to me and diverge somewhat from the classical conception which we intended to copy. The female figures were to represent the classical mythological Fates.

The 3 Fates assigned good and bad fortunes to mortals at the date of their birth. The first spun the threads which form the texture of each person’s life; she was pictured with a spindle or distaff for this weaving. The second Fate was the disposer of lots who decided on the length of life; she is represented with a scroll or globe. The third Fate cuts life off; she was depicted with a pair of scales or shears for weighing when the life had come to its destined end, or (with the shears) snapping it asunder at its fated termination.

But why the figure on the left holds (and contrary to the classical traditions) a cornucopia is beyond my wildest conjecture; a horn of plenty is entirely improper to be introduced into a picture of the Fates. The intrusion of the cornucopia is a blunder here. We or some one may, of course, have got ‘mixed’ in his classical recollections.

At the Committee, W. Sutton proposed a Seal containing these 3 figures. He said that the Institute should thus symbolize the uncertainty of life and

* This design is used in the *Journal*, etc.; the actual Seal is slightly different.

the (implied) need to protect its possible brevity by the creation of Life Assurance with which the Institute was associated. I said that such a picture was quite irrelevant to our work as a professional corporation since the Institute did not deal in practical protective provisions, but was simply a company of experts fashioning the mathematical machinery for carrying out these prudential measures. I proposed that our symbol should consist of the figure of a definite integral with the Assurance element under the sign and the upper and lower limits of integration, 0 and ∞ [*sic*] affixed. After a long discussion (when we all, no doubt, grew very learned) Sutton defeated me by a bare majority of votes.

A note in *J.I.A.* LIX, 345 makes clear the fact 'that of the three figures only one, Atropos, who is seen in the act of cutting the thread of life, can be correctly styled as one of the three fates'.

In 1899, it was ordered that an impression of the Seal be made 'for the use of the Engraver of the Book-plate for the Library'. The production of the actual book-plate is mentioned in Chapter VIII, pp. 285-6. Another extraneous impression of the Seal was authorized in 1906 when Mons. A. Quiquet, a Corresponding Member, asked for it 'for inclusion in his collection of medallions'.

It was not long before suggestions were made of changes in the Bye-Laws. In January 1890, notice was given to alter No. 40, which provided that, after 5 years from the date of the Charter, no one should be eligible as a Fellow unless he had passed the examinations prescribed for that class or the Council should dispense with them in the case of a person possessing one or other of the following qualifications:

- (a) having practised as an Actuary for upwards of 10 years in the United Kingdom or in one or other of its Colonies or Dependencies;
- (b) being the Actuary, Assistant Actuary or the Principal Officer (responsible for the actuarial work) of some Life Assurance, Annuity, or Reversionary Interest Society, or other analogous institution, having its Head Office in the United Kingdom or in one or other of its Colonies or Dependencies;
- (c) being the Actuary or Assistant Actuary of some department of the Government Service.

These three qualifications were operative, by No. 39, during the 5 years immediately following the date of the Charter.

The proposed change in No. 40 would have limited (a), (b) and

Amendment of the Bye-Laws

(c) by referring only to persons possessing any of the qualifications at the date of the Charter. A new qualification, however, was to be added whereby, on terms stated, a person might be elected a Fellow if he had been 'publicly eminent and highly distinguished for his abilities in Statistical Science, or Medicine, or Law'.

It is clear that this proposal arose from a strong desire to bring to a definite end the grant of the Fellowship to any save persons approved after examination or, quite exceptionally, persons of recognized eminence. The inclusion of Medicine or Law as a vehicle was suggested, presumably, because of the contact of these professions with Life Assurance.

The Council did not accept the proposal and, at a Special General Meeting held in February 1890, an amendment was moved on its behalf and passed under which Bye-Law No. 40 was altered to make the extra-examination qualifications more stringent than (b) and (c) of No. 39 but similar in conception; (a) ceased to operate and two-thirds of the whole Council (instead of one-half) must vote in favour of each dispensation. At the same time, there was removed from another Bye-Law the requirement of approval by at least three-fourths of those voting at the Ordinary General Meeting which (both before and after the change) had to make the actual decision in each case.

The amended Bye-Laws were allowed, after some verbal alterations, by the Privy Council in May 1890. Shortly afterwards, in connexion with a proposed revision of the Examination arrangements, it was suggested that no one be admitted a Fellow 'under the age of 25'. This change was not adopted and the prescribed age of 21 remained in force until 1937 when, under similar impetus, it was altered to 23. In 1908, on a proposal by the President, the Council authorized a Committee to consider whether it would be practicable and, if so, desirable to require a test of a candidate's competence for practical work before conferring the Fellowship. The only such test has been and is made through the Examinations.

Another subject that received much attention was the admission and lapse of Student Members and it was proposed, in 1897, to deal with the problem by revision of the Bye-Laws. The solution was found, however, by establishing a new class of Probationers, to whom reference is made hereafter.

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In 1908, T. E. Young raised the question 'whether the time has not arrived when the revision of the Charter and Bye-Laws should be considered'; the motion 'was, after some conversation, withdrawn'.

THE CONSTITUTION AND OPERATION OF THE COUNCIL

At the meeting of March 1886, the Council appointed a Special Committee 'for the construction of the House List'. In its report, two months later, the Committee submitted 'a list of names as President, Vice-Presidents, Council and Officers for the ensuing year'. Of those suggested, three (all of whom had come into the Institute, under the Charter, from the Actuaries' Club) declined to serve. One other nominee was not accepted by the Council and so, four fresh names were added to complete the list. It must not be supposed, however, that the refusal of the three just mentioned was due to residual bitterness on the part of the Club, for two of its members were on the Council.

In the following year, Standing Orders were adopted whereby, *inter alia*:

(a) The President and ex-Presidents were to be permanent members of the Council.

(b) A Reserve List was to be formed 'to comprise the Vice-Presidents, a certain number of ex-Vice-Presidents and the ex-Treasurer'.

(c) The Hon. Secretaries and the Treasurer were to appear 'in an official list', the remainder of the Council forming the general list.

(d) Five members, in all, were to retire from the Council each year.

(e) Subject to certain provisions as regards the various lists, the order of retirement was to be regulated throughout by 'seniority in respect of the last election on the Council'. New members, other than office-bearers, were to be placed in alphabetical order at the bottom of the general list.

(f) The retiring Hon. Secretary was to be made a Vice-President.

From time to time, these Orders were varied in some particulars. Thus, in 1891, (f) was rescinded 'after the final retirement' of the existing Hon. Secretaries. In 1892, it was agreed 'that when ex-Presidents retire from professional life, they should also retire from the Council'. The matter came up again in 1909 on a proposal to limit an ex-President's term, as such, to a maximum of 10 years; it

Election of Presidents and other Officers

was decided that the maximum be 6 years. The wind was tempered to the shorn ram by an additional resolution (long since usually forgotten) 'that an ex-President who shall not be a member of the Council shall be invited to sit at the Council table whenever he attend meetings of the Institute'. In 1898, the unusual course was followed of appointing to be Treasurer a Fellow who when so nominated was not a member of the Council. It was resolved in 1899 that the President to take office in the following year should be nominated by a Committee, but that the other officers and members of Council 'should be nominated in open Council'. The new procedure, as regards the latter part of the decision, was applied by a system of voting papers to be issued in March with provision for a second ballot, any ties to be decided by 'a ballot to be taken without discussion at the April Council'. This cumbrous procedure seems to have been modified soon after its introduction; when a vacancy occurred in 1900 by death, each member of the Council was asked to nominate a Fellow to take the place of the deceased. Voting by proxy, on the part of members of the Council and presumably only at its meetings, was approved in 1890. The apparently simple method of entrusting to a Committee the nomination of the new President did not always work satisfactorily. On one occasion, the Chairman made an oral report that the Committee 'having been unable unanimously to agree upon a name for submission to the Council, had decided by a majority to leave the nomination to the Council itself'. It was resolved 'that the Council nominate the President... at its next ordinary meeting, by the method of an exhaustive ballot'. And so was chosen one of the most distinguished holders of this high office. The number of retirements from the Council appears sometimes to have been six instead of five.

Members who may have wondered why only the Secretaries of the Institute are designated as 'Honorary' will be enlightened, if not convinced, by the record here that the Council so ordered in April 1901.

During the period under review, the terms of office of the Treasurer and of the Hon. Secretaries were reduced from the comparatively long period of 4 to 2 years.

The sense of community developed by work in the Council is marked by the decision of January 1904, when deaths of members

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were reported, to ask 'the Hon. Secretaries to write letters of condolence to the members of the families of those gentlemen who had served on the Council'.

As regards the Committees, it was laid down that each should contain one of the Vice-Presidents.

In the Spring of 1888, the Library Committee requested the Council to provide a responsible officer; it was resolved that a third Hon. Secretary be appointed 'who should specially undertake the duties of Hon. Librarian'. This dual plan was found to have 'great practical objections' and the Council decided, almost immediately, to create the plain post of 'Hon. Librarian'.

Towards the end of 1890, a proposal was made that a Legal, Parliamentary and Commercial Committee be appointed. The Council decided, by the casting vote of the President, that the matter be referred to a Committee 'to enquire into and report to the Council whether or not in its opinion the Institute has power to appoint a Legal and Parliamentary Committee and generally as to the power of the Institute to deal with practical questions arising out of Life Assurance'. The report was to the effect that a Legal and Parliamentary Committee could be and should be appointed, 'which should watch Bills before Parliament and report to the Council on any matters of interest to the Institute which may be found therein'. It was recommended also 'that the Council should decide as occasion arises on the other questions to be referred to the Committee'.

PREMISES AND STAFF

In 1884, the Institute moved, as has been mentioned in Chapter IV, with the Statistical Society to 9, Adelphi Terrace. In the autumn of 1885, the subject of ventilation and lighting arose and it was decided to write to the Society, 'to forward to them the estimate formerly received and to arrange if they think fit for the immediate execution of the alterations therein mentioned, either at the cost of the Institute or of the Institute and Statistical Society jointly'. One part of the problem remained unsettled for, in March 1886, 'the consideration of the question of lighting the meeting room was deferred'. Presumably, it was felt already that a change of accommodation was desirable. In October 1886, the General Purposes Committee was

Staple Inn

asked to consider the matter and, two months later, the Council accepted its reports in the following terms:

I. (i) That the present accommodation is not adequate to the needs of the Institute and that efforts should be made to secure premises more adapted to its growing requirements.

(ii) That an anonymous advertisement be inserted in certain newspapers such as the *Builder*, the *Architect* and *The Times* inquiring for suitable rooms within easy reach of Charing Cross.

II. (i) That Staple Inn Hall, with the two adjoining rooms, appears to the Committee, after suitable alterations and modifications have been made by the owners, to be well adapted to the purposes of the Institute.

(ii) That, on the friendly invitation of the Prudential Assurance Company, an offer of £200 [p.a.] be made for a seven years' lease of the premises, so altered and adapted, free of repairs and that, if necessary, a sum not exceeding £50 p.a. be also contributed towards the rates and taxes on an estimate thereof being obtained by the owners.

At the same meeting there was read a letter to the President from the 'Prudential', thus:

9th Dec. 1886

Dear Mr Day,

STAPLE INN

I think you said a Committee Meeting would be held tonight, so I thought you might like to know the result of my Board's deliberation. They will be prepared to let the Hall and the two adjoining Rooms to the Institute for an inclusive rent of £250 p.a. *upon a yearly tenancy*, making such reasonable alterations as may be necessary. They wish to reserve the right to make use of the Hall four times in a year during the tenancy, of course giving reasonable notice of their intention. They are not willing to bind themselves to seven years, but you may rest assured that the Institute would not be disturbed under ordinary circumstances. The Rent would include the extras of cleaning and the services of the porter but not Gas.

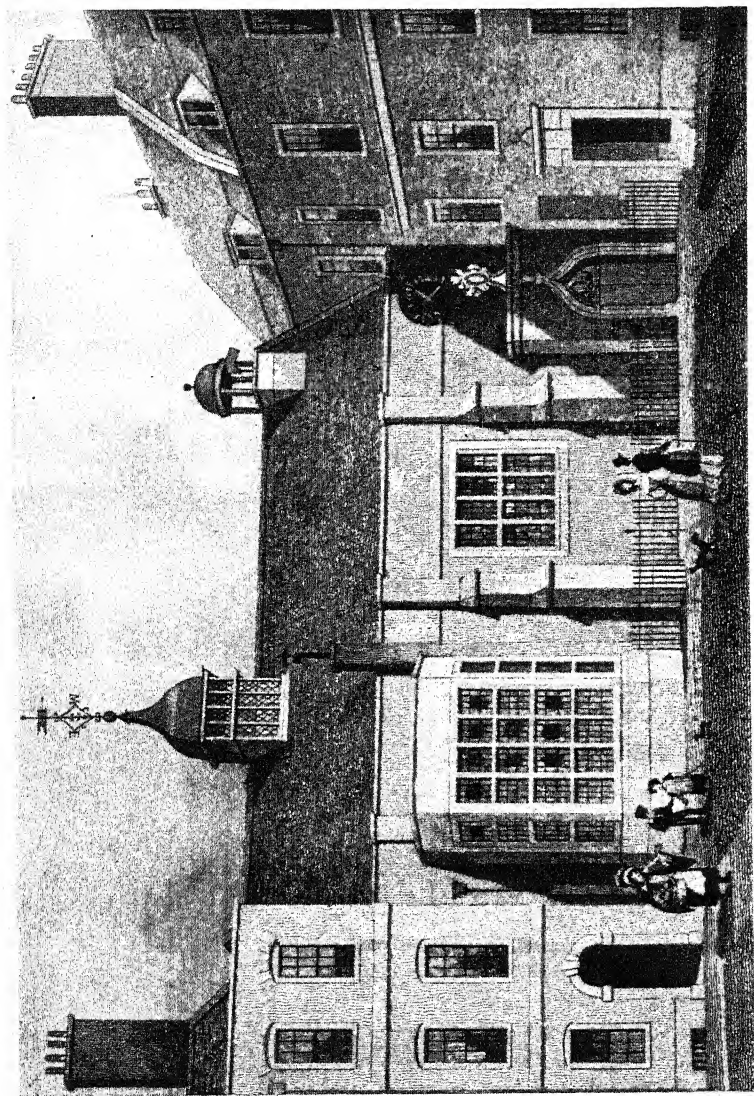
(Signed) W. J. LANCASTER

The offer was accepted unanimously and 'it was further ordered that notice be at once given to the Statistical Society that the Council do not intend, on the termination in June next of the existing agreement for tenancy of the present rooms, to ask for its renewal'. The Society replied regretting the severance of its 'connexion with the Institute in respect of House accommodation'.

The 'Prudential' promised that 'when the transfer of Staple Inn to them was completed, an agreement would be prepared for letting the Hall to the Institute' on the lines already offered and approved. Soon afterwards, the 'Prudential' mentioned that it would require the use of the Hall for ten evenings in the year instead of four—this change was accepted, 'it being stipulated that the regular Council, Sessional and Examination Meetings of the Institute should not be interfered with'. At the Council Meeting of May 1887, it was ordered that the seal of the Institute be affixed to the agreement for the tenancy and in the following month a Committee was appointed 'to make the requisite House arrangements at Staple Inn Hall, with power to incur the necessary expenses'. These appear to have amounted to £208. At its meeting of November 1887, the Council resolved to hold an Institute dinner 'in connexion with the commencement of the tenancy by the Institute of the Hall'.

So, the Institute came to Staple Inn—to remain in privileged, happy and enlarging occupation for 57 years, until that evening of August 1944 when the Old Hall was destroyed by a German flying bomb. That catastrophe will be mentioned more particularly in its chronological place. Here, a little must be said, incidentally, about the unique home that was enjoyed so contentedly for so long—but only a little, because the subject of this book is the Institute. Most happy among Presidents, in the chance that lay to his hand, Archibald Day devoted his Address of November 1887 to the history of Staple Inn. The print in the *Journal* (xxvii, 1) is prefaced by a fine view of the interior of the Old Hall, showing the bookcases that were ranged around the walls, the Council table and chairs (replaced years afterwards by the magnificent 'Phelps' gift) and the pre-electric lighting. The Address contains much curious information on the Inn and many details of the Hall itself.

There is also, in each issue of the Institute's *Year Book*, an article on Staple Inn, the account having been derived mainly from Day's Address and from a paper read in 1937 in the Hall by Mr Coombe, Joint Surveyor of the 'Prudential', before the City Branch of the Chartered Surveyors' Institution. A fuller account of the Inn is given by E. Williams in his book *Staple Inn: Customs House, Wool Court and Inn of Chancery—its mediaeval surroundings and associations* (Constable and Co. 1906). This author states that the Old Hall was built



STAPLE INN THE OLD HALL, EXTERIOR

A Description of Staple Inn Hall

in 1581 by Richard Champion, who appears in the book at the head of the list of Principals of the Inn as having held that Office from 1580-3. The following short extract from Day's Address will give a few details and evoke in many minds a memory of the Hall, which remained thus to the end, apart from the removal of the bookcases, the coming of the 'Phelps' Council table and chairs, the altered lighting and the careful introduction, early in the twentieth century, of steel reinforcement to a roof ravaged by the death-watch beetle:

The architectural features of the Hall possess considerable interest. Its length from the east wall to the screen is 47 feet, or to the wall at the back of the gallery 54 feet. The width is 29 feet in the Hall, and on the dais to the oriel window 35 feet. It is small compared with the dimensions of Gray's Inn Hall (70 feet by 35), which, in character, it very much resembles. The roof is surmounted by a louvre, now glazed, but which is supposed formerly to have been the vent for the smoke from the great open fire in the centre of the Hall, which was the only means of heating possessed. The roof is composed of ribs or arches of oak, with cornices and pendants according to the prevailing taste in the days of Queen Elizabeth, and is divided into four bays or compartments. Great pains have been taken by Mr Waterhouse, R.A., that the sixteenth century work should remain, as far as possible, in its original state, the only important alteration recently made having been the insertion of tie-rods to each of the principals—a measure which he considered highly necessary.

Samuel Ireland describes the roof as 'supported by five principal beams framed with Gothic ribs of oak, and enriched with grotesque ornament, and the ends of the posts are all carved and moulded with drops in the same style. On the lower short beams of the spandrills of the roof are placed upright ornaments of a grotesque and zigzag character, differing from any even of the most unmeaning decorations of the most tasteless period'.

These have excited the contumely of architectural visitors, who describe them as fit for the fetish of a New Zealander.

The panelling of the Hall is of oak, from which the paint has now been very carefully removed; and along the sides are fixed oak benches, which in olden times have been used for seats at the dining-tables, and for the students at the time of mootings. The Council of the Institute have utilized, but in no way damaged them, by making them the foundation of the book-cases which have been fitted around the Hall, and which seem to harmonize well with the rest of the building. The dais, upon which was placed the table whereat the ancients dined, is at the east end of the hall, and it is faced by the musicians' gallery, to which formerly there was no

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access but by a ladder. The case containing the clock, which is placed in this gallery, can hardly be praised for its beauty. Most of the books which contain any notes upon the Inn refer to the early date of the stained glass, variously stated as dating from the year 1500, or as being 500 years old. But though I make no pretence to being an authority upon that point, it seems to me clear that all that can claim any great antiquity are the central panels in the lower lights of the two windows on the south side; and they give the impression of having been made up of fragments of former windows.

Many of the fitments and ornaments were dispersed before, in 1886, the 'Prudential' bought the Inn. A few, such as the mace, came back in the course of the years. About 15 or 20 years ago, some 50 dinner plates bearing the woolsack emblem of the Inn were offered for purchase by the Institute. These mutilated remains of what must have been a considerable dinner service were not thought by the Council to be a justifiable object on which to expend the Institute's funds, so the plates were bought privately in ones or twos by members of the Council. At least one of the plates was destroyed by bomb-blast during the War of 1939-45 while serving as a cherished adornment of an actuary's room in the City of London.

But to resume the story—the tenant of an old building finds often that his real satisfaction and proper pride are accompanied by inherent difficulties. Any such disappointment may be more than mitigated now by the contemplation of the woes of occupants in general, but at the time with which this chapter is concerned, the sense of discomfort was relatively real. In May 1890, the Hon. Secretaries were requested to communicate with the landlords 'in reference to the damp, which is injuring the books in the Library'. Soon afterwards, the question arose of the heating of the Hall and the landlords intimated that they were 'prepared to instal an apparatus with the necessary furnace, etc. for heating the Hall by means of hot pipes, which will involve an outlay of about £150, and to arrange for a man to attend to the furnace, provided that the Institute agrees to pay an annual sum of £10'. The Council accepted these terms. Electric lighting was suggested in 1896 and an arrangement was made with the landlords for installation and maintenance subject to the Institute's paying 10% of the original outlay, estimated at about £180, as an addition to the rent. In fact, the cost 'slightly exceeded £150' and



STAPLE INN THE OLD HALL, INTERIOR

Miscellaneous Fitments for Staple Inn

the landlords 'per previous arrangement' proposed 'charging an additional £15 p.a. by way of rent'. The Council was careful to ask the landlords at an early stage 'to submit the manner in which they intend to light the premises'. In 1911, metallic filament lamps were placed in the Old Hall 'at a cost of about £15', specimens being 'fitted tentatively' and no objection being raised.

The Inland Revenue Office, in 1886, raised a question of Corporation Duty 'on property belonging to the Institute'. The letter is said not to have been dated—an early foreshadowing of the danger in the current practice of Government Departments, whereby letters are written, the dates being left to be inserted in ink at the time of actual dispatch. The Council replied that the Institute was not liable to pay the duty, but the Inland Revenue Office persisted and, after inquiry of other similar Bodies and the taking of legal advice, the Council decided to prepare and forward the requisite returns. The subject came up again in 1890 'in view of a recent decision under which the Institute of Civil Engineers was held exempt' from the tax. Soon afterwards, it was ordered by the Council that 'the Duty be paid under protest'. In 1902, the charge was £11. 4s. 6d.

Various fittings were provided as need arose. In 1888, the Finance Committee begged leave to recommend and it was agreed 'that the Hon. Secretaries be requested to purchase a consistently sized safe and a cash-box, for the use of the Assistant Secretary, at a cost not exceeding £10'. By 1902, a fresh safe was required, and the landlords were asked to have it 'built into the wall of the new building'.

In February 1898 it was moved and seconded 'that the Institute have a telephone put up'. The motion was carried 'provided that the roof be not made use of as a "centre" for other wires'. Two draft agreements with the National Telephone Company were submitted showing 'a rental of £17 on an agreement for 5 years or £20 for one year': it was resolved 'to conclude with the Company for one year only at present; prior to doing so the agreement to be referred to the Solicitor of the Institute'. On a report from the Solicitor that the Telephone Company 'would be empowered to use the premises of the Institute for carrying wires, it was decided to write to the Company and inform them that, unless the condition was expunged, the Institute could not become a subscriber'. The Company refused to waive its condition 'respecting the erection of wires on the roof

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of the Hall' and the telephone was not installed. Four years later, an arrangement was made with the Post Office for telephone service at a charge of £5 a year with a minimum extra of 30s. for calls—meanwhile, in 1900, a domestic telephone was fitted at a cost of £6. 15s.

The Council agreed in 1899 'that a typewriter be purchased, the cost of which should not exceed £25 net and that the selection of the machine be subject to the approval of the President and Hon. Secretaries'. Ten years elapsed and a new machine was bought, without formality stated, for £15. 17s. 6d.

It was decided, in 1899, to seek additional accommodation and plans were obtained from the 'Prudential' for 'Secretary's Room, Cloakroom and Actuaries' Examination Hall (38 × c. 32 ft.)'. The negotiations were completed in 1903, as is shown by the following extract from a report from the General Purposes Committee:

The Committee were of opinion that the tenure of the present and of the new premises should be on the same basis, that such basis should be sufficiently broad to ensure fixity of tenure with licence to the Institute to terminate the same at reasonable intervals, and that the rent should be a fixed annual amount, and on these and minor points, to which it is not necessary to allude in this report, they have been met by the fullest and fairest consideration on the part of the landlords. Your Committee are accordingly enabled to recommend the Council to surrender the present yearly tenancy which they hold of Staple Inn Hall and the two adjoining rooms, and to accept a lease of the whole of the premises for a term of 21 years, with breaks at the option of the lessees at 7 and 14 years at an annual rent of £600 p.a., the lessors paying all rates and taxes, doing all outside and structural repairs and inside repairs in respect of the Hall and the two adjoining rooms, and the lessees doing the inside repairs, painting etc. of the new premises, the lessors being also responsible for the heating and cleaning of the whole of the premises; and your Committee submit herewith a draft lease which has been prepared by the landlords embodying these terms.

The Council agreed and gave to the Committee power to furnish the new Hall. Thus, the Institute obtained a side-door and in 1904 'the question of a door-plate in Staple Inn Buildings was considered' but 'it was decided that such was not required'.

An unfortunate accident occurred in 1910 when a man was killed 'with whom the Porter of the Inn had arranged for the cleaning of

Loans and Lettings of Staple Inn Hall

the windows of the New Hall'. The Council 'while not admitting any liability in connexion with the accident' gave power to the President and Hon. Secretaries 'to pay to the widow of the deceased, as an *ex gratia* allowance, a sum not exceeding £50 in such instalments as may be arranged'. A claim, however, was made and settled eventually by the payment into Court of £50 and £10. 10s. solicitors' costs.

Possession of such interesting premises and of Halls so convenient in location and size led inevitably to requests for inspection, or for use as the meeting-places of outside Bodies. The first came in 1893 when the Children's Fresh Air Mission was allowed to hold its Annual Meeting in the Old Hall, 'the conditions being that the Mission were, at their own cost, to make such arrangements as may be necessary to prevent any damage to the Library, that the Assistant Secretary of the Institute be present throughout the meeting to see that the Library was not in any way interfered with, and that any expenses which may be incurred shall be refunded by the Mission'. Possibly, the Council thought it likely that the Hall would be filled largely with the beneficiaries of the Mission.

Soon afterwards, the Council obtained 15 guineas by letting the Hall for the examinations of the Society of Accountants and Auditors. 'The expenses of the Institute in connexion with the letting amounted to about 25s.' After a repetition at the same charge, the Society offered 10 guineas and was allowed to have the Hall 'half-yearly so long as convenient to the Institute, provided the landlords have no objection'. These intermittent lessees having asked in 1896 for a change of dates, 'it was decided to inform the Society that the Council could not alter the date of their meetings' and 'it was further agreed that the dates fixed by the Council should always be adhered to'. Soon afterwards, the arrangement was terminated by the refusal of the Council to grant the use of the Hall.

Requests continued to come from various quarters, including an Astronomical Association, a Masonic Lodge, a Medical Body, an Art Workers' Guild, a University Debating Union, the Dickens Fellowship, a gentleman interested in poetic recitals, well-known Charities and the Aerial League of the British Empire. Some were for gratuitous loans and others for renting—all were declined and, in 1909, 'it was resolved that all such applications be refused in future

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without reference to the Council unless, in the opinion of the Hon. Secretaries, there appears to be any special reason why they should not be so declined'. Exceptions were made in the cases of the Chartered Institute of Patent Agents (which, in these later days of dereliction, has given gracious help by making its adjacent Hall available to the Institute of Actuaries' Students' Society), the Federation of Insurance Institutes, the Conference of the Management Committees of Approved Societies and the National Conference of Industrial Assurance Approved Societies.

The London Topographical Society was allowed to visit the Hall in 1904 and, on two occasions, photographs were allowed to be taken, one for a work on 'London' and the other for a 'Handbook on the Libraries of London' to be issued by the University of London.

The Council kept also a careful eye on the question of a proper contribution from ancillary investigations such as those of the Joint (Institute and Faculty) Mortality Committee. In 1898, the Finance Committee 'ascertained that the charge to be made against the [Mortality] Committee, up to date, for housekeeping expenses (without, of course, any cost for the use of the rooms) is £41 and that a reasonable charge to be made for the same purpose in future would be £60 p.a.'. In later years, a still stricter account has had to be taken of the cost to the Institute of these associated activities. When, in 1900, the Joint Mortality Committee asked for storage accommodation, 'the Council consented to take charge of the documents referred to, but to assume no liability with regard to them'.

The salary of the Assistant Secretary was raised in 1886 from £80 to £120 p.a. and, as from Christmas 1888, to £150 p.a. In 1890, the clerk was given 3 months' notice and a new one was ordered to be obtained 'at about 30s. a week, whose office hours will be from 10 to 6 with an hour for dinner in the middle of the day'. On the new clerk's resignation in 1892, a Committee was appointed to consider the permanent staff generally. Evidently, this action was taken because the Council knew that the Assistant Secretary, J. C. Hopkinson, was about to give up his position. He resigned, after 8 years' service, expressing 'the pleasure I have experienced in the performance of the duties of the office' and thanking the Council 'for your many acts of kindness'. It was decided to grant to him an

Appointment of S. H. Jarvis

honorarium of one year's salary and to advertise in *The Times* and five other newspapers for an Assistant Secretary at a salary of £150 a year. A new junior clerk was to be appointed at a salary of £50 p.a. to increase by £10 p.a. 'until a maximum salary of £80 be reached'. For the senior post 442 applications were received 'and the eleven most likely candidates were personally interviewed'. A. G. Wiggins was selected unanimously and he was appointed at the prescribed salary subject to the following conditions:

(i) That there will be no pension allowed on retirement no matter how long he may have been a servant.

(ii) That the appointment is held during the pleasure of the Council, and that on his attaining the age of 65 he will be required to resign.

(iii) That he does not take any independent Actuarial work, or write upon Insurance subjects in newspapers.

(iv) That his ordinary office hours be from 12 until 6 o'clock, but upon evenings when the ordinary general meetings take place, as well as those when the Council and any Committee may meet, his attendance will be required until such meetings terminate.

The Committee also considered the appointment of a junior clerk 'and after seeing Mr S. H. Jarvis, who had been acting in a temporary capacity, appointed him permanently' at the salary advertised 'with the proviso that in the event of his services giving satisfaction to the Council' he should receive the foreshadowed increases: 'his office hours to be from 10 until 5 o'clock, except on Saturdays, when they will be from 10 to 3'.

Wiggins remained in the service for 10 years, being granted various increases of salary and gratuities for extra work. In 1900, despite the first condition of the appointment, a retiring allowance was pre-considered and the following cautious Minute was passed:

Resolved that the present members of Council cannot bind their successors, but they are of opinion that if the circumstances should be the same in 1902, a question of a retirement pension to Mr Wiggins of from £50 to £75 per annum might be favourably considered.

When the retirement actually occurred in 1902, it was decided that a pension of £65 p.a. free of income tax should be paid to Wiggins during the pleasure of the Council: he expressed his appreciation. His death occurred in 1906.

S. H. Jarvis soon confirmed the opinion of the Committee that he would be a good clerk. In 1894, he was awarded a special bonus 'in consideration of the extra work which he had been called upon to perform and of the satisfactory way in which he has carried out his duties'. Written evidence of this remains in the beautifully clear Minutes recorded in his hand, year after year, each page bearing Wiggins's initials. More and more plainly, Jarvis is delineated as the obvious successor to the Assistant Secretaryship and he was so appointed in 1902. Some of the conditions laid down at the time are reproduced:

(a) The Institute to remain open all the year and not to be closed in the summer as has hitherto been the practice.

(b) That he be in attendance at the office during the hours when it is open, also when Council or other meetings are being held in the Hall, with a holiday of one calendar month per annum at such times as shall appear satisfactory to the Hon. Secretaries of the Institute.

(c) That he be required to carry on all the duties hitherto performed by Mr Wiggins and that the compilation of the Card Indices of the *Journal* and of the Library be considered as part of his work. Also that he perform such other duties as the President and Hon. Secretaries shall from time to time direct.

Thus began a career as Assistant Secretary of 37 years, to which as a whole some reference is made in Chapter VI. Here, one curious item is recorded—in 1907 'the seal of the Institute was ordered to be affixed to a power of attorney authorizing the Assistant Secretary to serve on the Inspection Committee in the matter of the winding-up of the National Society of Qualified Accountants (formerly the Institute of Accountants)'.

When, in 1910, a new clerk was appointed, he was placed on probation for 6 months and required by the end of the period to show proficiency in shorthand.

MEETINGS AND MEMBERS

In October 1885, the President suggested that a shorthand writer be engaged 'to furnish a full report of all the proceedings at the General Meetings of the Institute'. Mr Callingham of the *Insurance Record* was approached and replied:

Curious Numbering of Annual General Meetings

that he did, as a rule, report the proceedings at the meetings of the Institute, verbatim, but that as he was under an obligation to the members for revising the reports of their speeches, he would undertake in future to take verbatim first person notes of the discussions and supply the Institute with a MS. transcript of the shorthand notes which he did not print.

He was requested to supply verbatim reports of the discussions at the meetings of the Institute 'during the present session', the Hon. Secretaries to arrange with him suitable remuneration. Accordingly, for a sum of 5 guncas he promised to supply 'verbatim first-person reports of the Institute meetings after they had been corrected by the speakers and he had used them for the *Insurance Record*. Before the next session began 'it was mentioned that the gentleman employed during the past session had expressed a desire to be relieved' and it was resolved not to renew the arrangements for 1886-7.

From the beginning, for some 40 years, the Annual General Meetings of the Institute were held on Saturday, but in 1890 a change was made to Monday. An amusing instance of the little ways in which experts fail in their own special province is afforded by the inconsistency in numbering the Annual General Meetings. The first example reported was held in 1851, but is not described by any number. The meeting of 1874 is said to have been the 25th, so suggesting that the first was held in 1850. This cannot be accurate unless no Annual Meeting was held in 1849. The 1875 meeting is called the 28th, which is explicable either on the basis of an undetected error, or on the assumption that the first general meeting of 1848 was counted (perhaps on the analogy of premiums payable in advance). The 1876 meeting was said to be the 27th and, taking a much later one at random, the 1930 meeting is called the 83rd. Current practice leaves the question in suspense and follows the unchallengeable plan of describing the Annual General Meeting simply as such; the Report of the Council then submitted gives correctly the number of the Session just passed.

Again, there are hints that discussions sometimes needed stimulation. In 1896, it was suggested that papers to be read should be issued 'earlier than at present'. Members who desired to have advance copies of papers were required, by a decision in 1902, to apply to the Assistant Secretary at the beginning of every Session, 'past and present members of Council to be, however, an exception to the

rule'. It was made clear in 1904 that the privilege of dispatch in advance applied to applicants 'resident in the Colonies'.

It appears that as late as 1897, the monthly meetings were being held at 7 p.m.; the Council decided that during the Session 1897-8 'all ordinary meetings be held, as an experiment, at 5.30 p.m.'.

Complimentary tickets of admission to the meetings of the Institute were ordered, in 1898, to be 'sent to the Presidents of other Learned Societies, who had sent similar invitations to the President of the Institute'.

The existing practice of appointing an Opener and a Closer of the discussion at each monthly meeting was foreshadowed by the decision in 1899 to invite a named member to speak. At this time, a paper offered for reading was submitted to only one referee—the practice had been to seek the views of two referees.

The grant of the Charter, with the Institute's new status, accounts for many of the matters that arose during the period, 1884-1914, in respect of members and membership. A form was prescribed under the 61st Bye-Law for the admission of persons as Students. Until the form should be ready, applications made for admission were to be deemed to have complied with the conditions. In 1886, it was decided that an Examiner of such applicants should be appointed: one person, named in 1888 as having failed to pass the Entrance Examination, was permitted to present himself again at the end of 6 months. The question of unfit Students, actual or would-be, continued to cause anxiety. Bye-Laws 46 and 47 were in the following terms:

46. No person shall be eligible as a Student who has not attained the age of sixteen years.

47. No person shall be deemed eligible as a Student unless he shall have given such evidence of his educational fitness as the Council shall from time to time prescribe; and it shall be in the power of the Council to require, in such cases as it may think fit, that a person applying to become a Student shall pass the Examination or Examinations declared by the Rules of Examination to appertain to such cases.

Various applications were refused for reasons not always stated. One such case was that of the Secretary of the 'Absolute': he asked 'why' in more than one letter and was informed that 'the Council do not give reasons for their approval or disapproval of applications

Admission of Students

and that their decision which has already been communicated to him is final'. Another applicant, who had been rejected apparently because of his employment in an American 'Assessment' Company, replied that he had moved to another and presumably orthodox Office. The Council inquired whether such position was likely to be permanent and, in the end, confirmed its refusal.

A Committee was appointed in 1895 to consider the list of Students, 'both with regard to its present numbers and future admissions thereto'. It reported thus:

After discussion, the Committee came to the conclusion that a check upon the growth in the number of Students not engaged in Assurance Offices is desirable, and it was decided to recommend to the Council

1. That the present form of application for admission as Student be altered so as to embrace questions regarding the age of the applicant and the object of his application, and to provide for his supporters verifying his statements on these points, and
2. That, in order to facilitate business at the meetings of Council, a Committee be appointed to previously consider and to report to the Council upon applications for admission as Students from persons not engaged in Assurance Offices, such Committee to meet when in the judgement of the Hon. Secs. the number or nature of the applications warrants a meeting being called.

And that it be an instruction to such Committee to consider the age and nationality of the applicant, and the object of his application.

The Hon. Secretaries were instructed to prepare and bring before the next Council Meeting a fresh form of application for admission as Students in accordance with the recommendation contained in the Report.

It was suggested that any Committee appointed to consider applications for admission as Students should also consider applications for exemption from the preliminary examination. These tasks were given to the Chairman of the General Purposes Committee.

Thus, one of the chief preoccupations—in days before the emphasis on the scope of the profession—was the number of applications from persons not engaged in Assurance business. Accountants appear to have been a specially exciting influence for, in 1897, they were the cause of the appointment of a fresh Committee 'to consider exhaustively the entire question of the status of Students'. Meanwhile,

an applicant aged 57 was refused and, in June 1897, another who had been approved in March 1896 and now desired 'to complete his membership' was ordered to begin again. The Committee recommended and the Council agreed that the Bye-Laws be revised 'with regard to the admission and lapse of Student Members'. The word 'lapse' is significant. In the end, as was mentioned earlier in this chapter, another solution was found by establishing a new class of *non-members* called Probationers 'attached to the Institute but not of the Institute'. Their names were not to be printed with the list of members or published in any form; they could join the classes and attend the Sessional Meetings, but would not be entitled to receive the *Journal* (which was issued to Students free of charge). They were allowed to borrow books from the Library. When the new class was established, it was provided that no one should be eligible for admission to the class of Students until he had passed Part I of the Examinations. Despite this rule, there were for some years candidates who were approved as Students 'subject to their passing Part I of the Examinations'. The references are rather obscure, but it seems that a measure of selection was adopted. Cases are on record in which 'Conditional Students' became Probationers. There is no evidence that any distinction between the two categories involved a practical difference.

A Japanese Probationer was accepted in 1900.

Two Probationers, who were admitted in October 1906 and who had failed in the test for continuation in the Tuition Class for Part I, were granted in November 1906 a return of entrance fee and subscription. Here is striking evidence that the problem of the unsuitable applicant had not been solved.

The general question of 'a uniform standard of Entrance Examinations to be adopted by various Societies' arose in 1901 on a memorial from the Headmasters' Conference, but the Council declined to alter its practice. In 1903, however, the Institute was represented at a Conference called by the Consultative Committee of the Board of Education. Various important professional and other Bodies took part, but not 'the two Law Societies'; the attitude of the Institute and its current practice are made clear by the following extract from the report submitted to the Council:

Your delegates put in a copy of the Rules to regulate examinations of the Institute of Actuaries, with a memorandum of which a copy is given

Probationers

below, and explained verbally in few words that for admission to the lowest grade of membership, namely that of Student, a severe mathematical examination was exacted, and only those were exempted from that examination who had taken a degree in Mathematical honours in a University of the U.K. They further explained that the majority of those seeking admission to the Institute of Actuaries came from the Life Insurance Companies, and that as a rule the Life Offices insisted on an examination in general culture before placing a candidate on the staff, and that the Council of the Institute of Actuaries was accustomed to accept such examination as sufficient for admission as Probationer, but that they reserved to themselves the power of submitting any candidate to an examination, and that no doubt the Council would accept a senior certificate of the kind suggested to the Conference, as sufficient proof of the fitness for admission as Probationer.

Probably, when in the light of the discussion which took place at the conference, the plans proposed have been further considered and revised, another conference will be held.

Memorandum referred to in the above Report

The Rules to regulate the Examinations of the Institute of Actuaries are attached hereto and attention is called to those relating to Probationers, who are not members of the Institute. An application to become Probationer must be approved by the Council, and the Council is accustomed to accept any reasonable evidence of general culture such as the examination usual with Insurance Companies for appointment to their staffs, and no doubt would accept the suggested senior certificate.

Later, on receiving from the Board of Education a copy of the Committee's suggestions, the Council 'decided to inform the Board that, as the Institute has no Examination for which any suggested examination for school certificates could be considered an equivalent, the Council has no opinion to express upon the general system proposed'.

In 1910 it was proposed to introduce a *viva voce* examination of those candidates for admission as Probationers whose educational qualifications did not come strictly within the rules. The suggestion was not adopted. A year later, the general question of admission of Probationers was felt still to require consideration.

The Register of Members was placed under the supervision of the General Purposes Committee, which suggested in 1888 that the book should be laid before it at each meeting so that the Committee might

report to the Council, from time to time, that the record had been kept up to date. In 1901, the List of Members was ordered to be made up as on 1 January instead of 1 October, but in 1912 the decision was reversed by the curious instruction 'that in future the Annual List of members be made up to as early a date in October as possible and that it be issued separately and not included with the *Journal* as has been the practice in recent years'. The marking of members in the lists, to indicate examinations passed, was settled in 1903 thus:

FELLOWS

Those marked † are Fellows by Examination.

STUDENTS*

Those marked 1, 2 or 3 have passed one, two or three of the four Examinations of the Institute.

Those marked (1) have been exempted under the Bye-Laws from the Examination in Part I.

The Council felt able in 1890 to consider the acceptance of composition fees for subscriptions. The right was allowed only to Fellows aged 40 or more and a scale ranging from 36 guineas (ages 40-45) to 15 guineas (age 60) was introduced—Town and Country Fellows to be treated alike. A sum of 10 guineas was to be accepted on retirement from the profession after age 60 and special steps were taken in at least one such case to draw a member's attention to this facility.

Reinstatement of lapsed members (termed 'defaulters'), when permitted, was allowed on varying terms; occasionally, a fine was charged and in 1903 this penalty was definitely prescribed—though often waived—for cases in which subscriptions were not paid by 31 March. Associates were to be fined 5s. and Students 2s. 6d.: it was not expected apparently that a Fellow would need to be considered. The date of reinstatement was to be inserted against the name in the List of Members. A strange case occurred in 1908 when a lapsed Associate applied for reinstatement as a Student. The Council, considering that it had no power of degradation, agreed specially to restore him to associateship. One gentleman, whose fellowship had lapsed in 1874, applied in 1909 for reinstatement, but the Council did not agree. A few members, serving in the Forces in the Boer War, were treated leniently.

* For Associates, the marking was on a similar basis.

Corresponding and Honorary Members

Resignation, by a member in arrear, was not always accepted. Two such cases were refused in 1888, but there is no record of any attempt at collection of the amounts regarded as being overdue.

The new form of the Certificate of Competency, containing a reference to the Charter and Bye-Laws, was approved in 1890 and ordered to be issued 'to all Fellows who have passed the Examinations and who have not already received a certificate'. A member whose certificate had been 'accidentally spoiled' was granted a new one in 1892.

The question of election of Fellows of the Faculty to membership of the Institute provided several cases of interest. One Fellow practising in London was given the Fellowship of the Institute without examination, on a second ballot taken some 4 years after the first, which had failed from insufficiency of affirmative votes. Another Scottish actuary was elected a Fellow of the Institute in 1899, shortly before he became President of the Faculty. During his term in that office, he was made a member of the Council of the Institute. Gradually, a practice was formed of conferring the Associateship of the Institute on application by Fellows of the sister Body.

Corresponding Members came up for consideration frequently during the period. The distinguished Belgian Actuary, M. Bégault, so long specially known for his outstanding interest in and services to International Congresses, was elected in 1894. Three French Actuaries received the honour in 1895. The famous Dr Julius Altenburger made application himself—he was admitted in 1900 after information had been obtained about his professional status and the regulations relating to Corresponding and Honorary Members had been reviewed. The Committee appointed in the matter recommended, as regards Corresponding Members, 'that in future no application be received except on the previous request of the Council'. On the question of Honorary Members, the Committee showed in a list that only thirteen elections had been made since the establishment of the Institute—the single instance after 1870 being that of Lt.-Col. Oakes, in 1894. It considered 'that while it might be desirable to have the support of leading men outside the profession, yet, having regard to the length of time the practice has been disused', the direction of the Council should be sought 'as to whether further Honorary Members should be elected at the present time'. The Council discussed the matter but came to no decision.

The position of Corresponding Members was defined by a ruling that those in each country should be asked to arrange among themselves for one to act as 'correspondent' and it was suggested in 1901 that 'Corresponding Members should be invited to write annually a letter describing any events relating to our profession which may have happened in their respective countries and mentioning any Government or other publications of interest'. Such communications as appeared to be useful to the editor of the *Journal* were to be handed to him. A considerable list of further potential Corresponding Members was submitted at the same time: objection having been raised to their election at an Annual General Meeting, an Ordinary Meeting was held for the purpose immediately after the Annual Meeting. A direct Brazilian applicant was informed 'that he could only be admitted a member of the Institute in the usual manner by examination and that there was no prospect of examinations being held in Brazil'.

The first application by a woman for admission as a student was received in 1894 from Miss Alice Sarah Hussey of Rochester, New York. The Institute's solicitors advised that 'in their opinion the Council had no power to admit ladies as members'. There was some stirring in the dovecots at this time, for the Institute of Chartered Accountants wrote inquiring about the Institute's practice. One member of the Council submitted the following resolution (which, 'with the permission of the Council', was withdrawn):

Whereas (1) it is desirable that no person should be disqualified from obtaining admission into the Institute as a Student by reason merely of sex, and (2) doubts have arisen respecting the competency of the Council to interpret the provisions of the Royal Charter and Bye-Laws of the Institute as applicable to persons of the female sex: It is expedient that the Council should take steps to set at rest such doubts by obtaining the authoritative interpretation, and, if need be, the amendment of the said provisions.

Applications by members for the reduction of their subscriptions, on the ground of residence away from London, were made on two occasions and refused.

In 1904, 'a letter from the Paymaster-in-Chief of the Royal Navy stating that the Admiralty are organizing a reserve of Assistant Paymasters for service in the event of war, and that he was desirous of

Some of the Distinguished Dead

ascertaining whether young Actuaries would be likely to join such a force, was read. It was decided to publish the letter in the *Journal* together with a copy of the Regulations that had been enclosed'. The answer was given in the War of 1914-19.

Naturally, the period 1884-1914 brought notable losses by death; some of those who passed on had been among the earliest supporters or opponents of the Institute. Brief and inadequate mention is made of those following:

- 1886. J. HILL WILLIAMS: Ex-President and an Original Fellow.
- 1887. P. GRAY: In charge of the computation of the Institute Life Tables. Compiled various Logarithm Tables. Wrote on Finite Differences etc
- 1891. W. M. MAKEHAM: Developed the 'Gompertz' Law of Mortality into the 'Makeham' Law. Wrote on the Theory of Decremental Forces and on the Theory of Probability
- 1892. J. GODDARD: An Original Member of the Actuaries' Club.
A. G. FINLAISON: An Original Fellow of the Institute. Devised a primitive Card System.
- 1893. W. S. B. WOOLHOUSE: An Original Member of the Actuaries' Club which he left to become a Fellow and then an Honorary Member of the Institute. Pioneer in mechanical graduation. Greatly developed the Theory of Life Contingencies by using the Continuous Method, the Euler-Maclaurin Summation Formula and the companion Woolhouse Formula.
- 1900. H. W. PORTER: Contributor of published Solution of questions set at the first Examination, in 1850. Author of a very early paper on the Education of the Actuary.
A. J. FINLAISON: Ex-President.
- 1904. E. DOCKER: An Original Member of the Actuaries' Club.

In 1911 the President, G. H. Ryan, received the Honour of Knighthood and, in the following year, A. W. Watson was appointed Actuary to the Joint Committee of National Insurance Commissioners. He gathered a distinguished staff of actuaries and, some years later, was promoted to be the first Government Actuary of modern times; he was knighted in 1915 and made K.C.B. in 1920.

EXTERNAL RELATIONS

The number and the almost bewildering variety of these matters justify separate treatment, though nothing more than a short sketch can be provided.

Governmental administration and actual or possible legislation account for more than twenty subjects, some of which required prolonged attention by the Council. Taken, in general, chronologically, the series began in 1886 when the 'Actuary of Friendly Societies' communicated to the Institute the conditions on which Fellows might be approved as Actuaries to certify Annuity Tables for Friendly Societies under the Act of 1875. Next, in 1889, the matter of assignments of life policies was investigated on the suggestion of C. D. Higham; information was collected from the Colonies and the General Purposes Committee instructed to give 'a definite expression of their opinion upon the principles they would recommend to be adopted in the event of legislation'. A sum not exceeding £30 was placed at the Committee's disposal for professional assistance. In 1891, there began the long though intermittent consideration of Life Assurance Company legislation. It is of interest to note that the Actuaries' Club was made a party at the initiation of these discussions, as also were the Life Offices' Association, the Faculty of Actuaries and the Managers' Association in Scotland. The subject dropped in 1892, since the Board of Trade was not ready to proceed, but came up again seriously in 1907; the Institute worked in parallel with the Life Offices' Association. Some slight further delay occurred and then, in 1909, the Assurance Companies Act was passed. The Council appointed certain members to confer informally with the Board of Trade, on its invitation. Lengthy memoranda were prepared and submitted. When the Bill had become law, some Associates of the Institute, who held positions as Actuaries of Life Offices, communicated with the Council about the Rules to be made by the Board under Section 29 of the Act and steps were taken to safeguard the proper interests of these members. An obscure reference at the time to correspondence with the Board of Trade regarding 'a proposed Society of Incorporated Actuaries' may have had some connexion with the matter just mentioned.

The next subject was that of the Joint Life Annuity Tables prepared

by the Actuary to the Commissioners for the Reduction of the National Debt. In 1894, it was suggested that the Institute should have the tables printed. It was found that they had been prepared in the form required for the grant of Government annuities and so included the various corrections for the mode of payment—in some cases the annuity value was ‘expressed in Consols’. The Hon. Secretaries reported that ‘a great deal of trouble and expense would be involved in altering these tables so as to show the function in the usual form’. There were, however, various abstract tables of ordinary annuity values, for single and two-joint lives, privately prepared for the Actuary to the Commissioners, and it was understood that about 90 pages of the *Journal* (or perhaps 70, if the tables were compressed) would be occupied. These last-mentioned tables were printed with the addition of some fundamental functions and 1,000 copies were ordered, to be sold at 10s. 6d. per copy. A reduced price of 6s. was charged to members of the Institute and complimentary copies were sent to the Treasury, the National Debt Commissioners and ‘each of the three gentlemen in the National Debt Office who assisted in reading the proofs’.

It was decided in 1891 to take no action regarding the Stamp Bill and in 1894, the President, ‘in his private capacity’, was left by the Council to suggest, as desired by the London Chamber of Commerce, the names of two gentlemen to serve as arbitrators. When, in 1895, the Chamber invited the Institute to appoint delegates to a conference on the amendment of the Companies’ Acts, the Council declined, but C. D. Higham undertook to examine and report to the Council upon a draft proposed Bill. The Report of the Departmental Committee on the subject was referred to him later and he advised that steps be taken to relieve Assurance Companies from certain requirements. In 1899 there was contact with the Life Offices’ Association on a Companies’ Bill. A further invitation, in 1900, from the London Chamber of Commerce to a conference on Company Law was not accepted. The Companies’ Bill, 1907, provoked attention and a resolution was passed, and communicated to the President of the Board of Trade and others, stating that Assurance Companies, in view of existing legislation affecting them, should not be subject to some of the provisions of the Bill.

The Money-lending Bill of 1899 raised the question of specific

exclusion of Assurance Companies: it was found, on inquiry, that the Life Offices' Association had been informed that the measure was not considered to apply to Assurance Offices.

The Actuaries' Club wrote, in 1900, to the Council about actuarial valuations under the Finance Act 1894. A conference took place with the Inland Revenue authorities and led to the well-known arrangement recorded in *J.I.A.* xxxvi, 81, and the *Institute Year Books*. In the same year a telegram was received from the Colonial Office asking for assistance 'in the matter of extra premiums on members of a new battalion of Railway Pioneer Corps, now being formed in South Africa. The Hon. Secretaries were instructed to send a suitable reply'.

The proposed preparation of life tables from the Government establishment books in India 'was discussed', in 1901, with the India Office and advice was given. Nothing seems to have been done, for in 1903 the Hon. Secretaries were 'instructed to write to the India Office inquiring whether they are taking any active steps to prosecute the investigation which was contemplated in 1901'. The letter was acknowledged, in terms unrecorded, and the matter rested until 1910 when the India Office agreed 'to obtain the information on the lines suggested by the Council in 1901'. The Council expressed agreement with the proposal that T. G. Ackland be asked to deduce the mortality tables from the data.

The solicitor to the Board of Trade asked unavailingly, in 1903, through T. G. Ackland, for the advice of the Council 'in making a valuation of Nelson's Pension Tea Co.' The Legal Note (*J.I.A.* xlii, 183) shows that, when a winding-up order was made against the Company, there were 'about 19,000 widows who had become entitled to pensions and about 300,000 customers who were buying tea under the pension scheme'. If the customers (whose addresses were unknown) participated in the distribution, 'the share of each would not be more than fourpence at the outside'. The Court gave the existing pensioners priority, as a result of which those entitled to a pension of 10s. (presumably per week) 'would receive about 18s. each and those entitled to pensions of 5s., about 9s.'

A member of the Council was appointed in 1904 to give evidence before the Parliamentary Committee on Income Tax, and in 1906 the President 'while not specially wishing to make representations

on the subject' was asked to hold himself at the disposal of the Select Committee of the House of Lords on Life Assurance Companies. The chief question was the provision of adequate security for British policyholders in Overseas Offices carrying on business in the United Kingdom.

The Council felt it inexpedient 'on grounds of general policy' that the President should accept an invitation in 1908 to give evidence before Lord Farrer's Committee on Post Office Life Assurance.

The Budget of 1909 caused several references. A printed memorandum was prepared and submitted to the Chancellor of the Exchequer—subsequently, representations were made on the question of the Inland Revenue rules *re* Increment Duty.

The Local Government Board invited and received the views of the Council in 1911 'as to certain of the provisions in the Acts of various Borough Councils relative to Superannuation Funds'. In the same year, G. Marks 'raised the question of the representation of the Institute on the Parliamentary Committee to enquire into the financial relations between England and Ireland and the relations between Imperial and Local Taxation'. He was asked to carry the matter further at his discretion and had correspondence with Lord Southwark, the result of which is not recorded. Also, in 1911, the Council set up a Committee to examine the National Insurance Bill and to 'watch its progress'. It was suggested to the Chancellor of the Exchequer that the word 'valuer' be altered to 'actuary' in two Clauses of the Bill.

Finally, in 1914, the Institute joined in a deputation of the Life Offices' Association and the Associated Scottish Life Offices to the Chancellor of the Exchequer with regard to the Income Tax provisions of the Finance Bill.

In addition to all these 'Government' matters there was, of course, the perennial question of the Census. An unusual aspect appeared, when, in 1895, the London County Council was in correspondence with the Institute regarding the proposed Census of London. It was decided not to 'approach the Local Government Board, as suggested by the London County Council'. Special consideration was given to the National Census of 1901 and representations were submitted to the Government. Strong advocacy was made also of

a quinquennial Census. A memorandum was sent to the Local Government Board concerning the Census of 1911. In 1913, the Registrar-General wrote to the Institute on the subject of extra Life Tables based on the statistics of this Census and received suggestions accordingly.

For many years, the Institute has had the privilege of advising the Royal Patriotic Fund Corporation on actuarial questions. The connexion began in 1901 as the result of a suggestion from G. J. Lidstone. Reports were supplied upon various funds administered by the Corporation, formerly known as the Royal Commission of the Patriotic Fund, and warm appreciation was expressed of the help thus given. By the end of 1902, eleven funds had been valued. In 1904, the work was in connexion with an appeal to the public for the augmentation of the funds so that the benefits originally intended might be given: the investigations made by the Institute had shown that a large supplement was necessary. A letter of 1904 from the President of the Institute contains, however, a suggestion that it was thought proper to put some limit on the requests for revaluations which, unfortunately, had been described by the Corporation as 'usual'. When, in 1906, the Corporation asked the Council to nominate one of its members to make future valuations, it was decided that such action could not 'properly be considered within the scope of its functions'. The President of the Institute for the time being was co-opted in 1907 to the Corporation: this happy link remains and advice is given as occasion requires.

Of the numerous other outside matters, the first was the proposed Life Managers' Association. Towards the end of 1888, the promoters of this Body—which became the Life Offices' Association—sent details to the Institute. It seems that the original intention was to have a Body affiliated in some way with the Institute. When the subject was considered by the Council, some members were found to be in favour of substituting for the proposed Association a Legal, Parliamentary and Commercial Committee of the Council on which a member of the Institute might serve, even if he were not on the Council itself. Others felt 'that the objects of the proposed Association, however strongly they may commend themselves to individual members of the Council in their business capacity, are entirely outside and foreign to the objects of the Institute as defined in its

Examinations of the Federated Insurance Institutes

Charter'. The view just expressed prevailed and so a separate, but entirely friendly Association was formed: not unnaturally, many of its most influential representatives have been leading members of the Institute. C. D. Higham in *Early History* gives a picturesque account, inaccurate in some details, of the crucial Council Meeting and stresses the closeness of the voting and the accidental nature of the actual result.

In 1892, 'it was resolved that it is desirable, subject to further inquiry, that the Institute of Actuaries should be added to the list of Commercial, Scientific and Artistic Associations and Institutions having *ex officio* a member on the Governing Body of the Imperial Institute of the United Kingdom, Colonies and India'. The President for the time being was so appointed after the exchange of correspondence.

A delegate was sent to the Decennial Celebration in 1899 of the Actuarial Society of America.

The Council accepted in 1907 an invitation from the Board of Education to appoint one of the ordinary members of the Governing Body of the City of London College and in 1908 selected the President for the position.

Attention was given to the subject of Mutual Assessment Assurance Offices, but no positive action appears to have been taken.

Information having been received of the formation of an Institute of Insurance in Japan, it was agreed in 1895 to 'present the new Institute with a copy of our principal publications' provided that the Hon. Secretaries were satisfied, on inquiry, 'as to the Correspondent'.

Organizations connected with British Assurance received sympathetic consideration. A list of members of the Institute was supplied in 1896 to the promoters of the Insurance Clerks' Orphanage in connexion with the distribution of a pamphlet. The Council considered in 1901 what steps it could take to conduct the 'Life Branch' Examinations of the Federation of Insurance Institutes of Great Britain and Ireland on behalf of that Body, but it was found that the scope of the proposals had been reduced and that the Federation would be able to undertake the work itself. In 1907, the Federation asked for the opinion of the Institute upon the continuance of these Life Examinations. The report of the Committee that went into the matter was received and, after almost a year, the Council decided that the Institute

could not hold examinations on behalf of the Federated Institutes. Support was given in 1910 to the petition that led to the grant of a Royal Charter to the Insurance Institute of Great Britain and Ireland.

Francis Galton suggested in 1905 that the Institute collect data for the investigation of the question of the influence of Family History and Personal Antecedents on Longevity and Health. The Council, 'while appreciating the importance of the proposals', regretted 'that, as such, they are unable to entertain the idea of carrying them out'. A donation of 50 guineas was made in 1911, when Prof. Karl Pearson sent an appeal for funds to build the Francis Galton Laboratory and a further 10 guineas were contributed in 1914 towards the cost of producing Pearson's *Tables for Statisticians*.

In 1908 Lord Strathcona, the High Commissioner for Canada, asked the President for the advice of the Institute 'on certain points connected with the proposed Life Assurance legislation in Canada'. The Council was much gratified by the approach and gave cordial approval to a short memorandum, prepared by the President, of which the gist was that the Council could advise, not on specific selected points, but only on a general case 'dealing with the Bill as a whole and the fundamental principles involved therein'. There was a plain hint that the Bill contained provisions which, unless altered, might make it difficult for the Institute to advise.

The Napier Tercentenary Celebration, held in Edinburgh in 1914, was supported: the President for the time being and G. J. Lidstone were nominated to the General Committee and a gift of £10 was made towards the cost of the memorial volume.

Various other matters were raised that failed to secure the approval or support of the Council. A somewhat surprising example is the refusal in 1910 to help in the proposed establishment of an Actuarial Society in Spain. The Consulate-General had asked the Council to recommend a qualified person to organize such a Society and to give the necessary instruction to its members.

Exchanges of publications were arranged with other Bodies, mainly overseas. When, in 1886, the Franklin Institute of Philadelphia called attention to the non-delivery of the *Journal*, 'it was resolved that copies be sent up to January 1886 and that the Franklin Institute be informed that it was not desirable to continue the interchange any longer, as the two Societies do not treat of kindred subjects'. In

Misuse of 'F.I.A.' and 'A.I.A.'

reply, an inquiry was made about the cost of the *Journal*; the information was given and the Franklin Institute, without success, asked the Council to reconsider its decision. In 1895 the Insurance Institute of South Australia was given as much assistance as possible 'in selecting and purchasing books' for its Library.

MISCELLANEOUS MATTERS

The position of the Institute as a Body incorporated under Royal Charter made appropriate the offering of Loyal Addresses to the Crown. The first and a happy occasion came in 1887 when Her Majesty Queen Victoria celebrated her Jubilee: an Address was tendered and graciously accepted. A similar course was followed at the Diamond Jubilee and on the deaths of the Queen and of King Edward VII. The Institute gave 50 guineas to the Queen Victoria Memorial Fund and 100 guineas to the King Edward VII Memorial Fund.

By Article 36 of the Royal Charter 'a Fellow may use after his name the initials F.I.A. and an Associate may use after his name the initials A.I.A.'. It behoved the Council to safeguard this privilege, not merely so that the initials might become understood as referring only to a person belonging to and amenable to the discipline of the Institute, but also that no unqualified person should be able, through misunderstanding, to obtain acceptance as an Actuary. The Council had much work to do in this matter in the years 1884 to 1914. The first case was that of auditors in Australia who, in November 1887, were stated to have 'attached to their names' in the report to a Bank 'the title of F.I.A.'. A protest was made to the Institute of Accountants and Auctioneers. A month later, the Council had four separate and unassociated communications 'in connexion with the unauthorized use of the initials F.I.A. and A.I.A.'. The nuisance recurred 'in the Colonies', perhaps in illustration of the adage 'out of sight, out of mind'. Mr Joseph Mills, of Sydney, who had reported cases, was thanked in 1888 'for his valued aid'. More subtle instances arose in England, where certain Students were found, in connexion with Friendly Society work, to be describing themselves truly but misleadingly as 'Members of the Institute of Actuaries'. One remembers the piano in *The Diary of a Nobody*, as having been manufactured by

W. BILKSON from COLLARD & COLLARD. The Minutes of a Council Meeting of June 1888 contain, *inter alia*, a side-heading 'Piracy', referring to a case of this kind. Immediately following is a note that 'the President called attention to the appointment of a Committee of inquiry into Trustee Savings Banks and it was resolved to refer the matter to the President and Vice-Presidents with power to take such action as they think best'. This question had been raised by a member of Council who, in a letter, drew attention to the failure of the Savings Bank in a large City—'a result largely caused, it would appear, by the defalcations of the actuary'. The letter added:

In the correspondence that has followed the publication of the official report into the origin of the insolvency of this Bank, the responsibilities and position of Savings Bank 'Actuaries' have been unsparingly commented upon; and the Trustee Savings Bank Association has even been designated by a Member of Parliament, 'A Trades Union of Actuaries'. . . I am led to believe, on the best authority, that the use of the term 'Actuary' by Savings Bank officials is a mere compliance with Statute; hence, it might be inferred that the Institute, through the Council, could only take action against the continuance of the custom, in the event of fresh legislation being introduced. . . . But I would also take the liberty of suggesting that the Council might consider the desirability of submitting an official protest. . . . The present scandal has brought the subject into unpleasant prominence and may have begotten a feeling of mistrust to the detriment of properly qualified actuaries. But I am bound to say that the same objection would exist in the use of the term 'actuary' by Savings Bank officials if there were no defalcations to lay to their charge. And, therefore, I would submit that action is justifiable and desirable not so much to relieve qualified actuaries from such discredit as dishonest persons may bring upon them by the use of their title, as to maintain the status of the Profession and preserve that interpretation of the actuary's functions and qualifications which the Charter has recognized.

It was mentioned in Chapter II that the first President of the Institute had made pointed comment on the matter at the General Meeting of 14 October 1848.

In 1889, the Council appears to have rejected an application for admission as Student by a Friendly Society Valuer: 'it was resolved that the Referees. . . be applied to with a view to the withdrawal of their signatures from the Form of Application'. An interesting variant occurred in 1891 when an application for admission as Student

Further Mis-descriptions

was approved 'subject to an explanation of [the applicant's] description of himself as "Actuary"'. The Council was annoyed, justifiably, in 1898 when a copy of a pamphlet of some Oddfellows was produced showing that its valuer described himself as 'of the Institute of Actuaries'. The man in question had been rebuked years before, when a Student, for using the title 'Member' and had resigned in 1893. 'It was decided that a strong letter should be written to [him], desiring him at once to cease the use of this reference to the Institute.' Definite guidance was given to the members when the Revised Rules and Syllabus of Examinations and the Regulations for the Class of Probationers were published in the *Journal* for January 1899:

Experience has shown that the intention of the framers of the Charter has been frustrated by some persons, who have been elected Students, publicly using the title 'Member of the Institute of Actuaries'. Clause 36 of the Charter provides that 'a Fellow may use after his name the initials F.I.A., and an Associate may use after his name the initials A.I.A.'; and the Council of the Institute desire it to be understood that they strongly disapprove of any other title being used by Members, unless at the same time the class of membership be mentioned. (*J.I.A.* xxxiv, 413.)

A flagrant example of the misuse of the letters 'F.I.A.' came in 1903 when the London manager of a House Purchase Insurance Company so described himself and, on being asked for an explanation, retorted: 'I have to inform you that the letters "F.I.A." after my name do not in any way refer to the Institute of which you are the Secretary, but to a totally different Institute altogether, nor have I even held out that I was a Fellow of your Institute.' This brazen effort was referred to the Solicitors of the Institute, who reported in due course that the Insurance Company concerned had informed them 'that the letters referred to should be omitted from any literature issued by the Company and that [the culprit] had promised to omit them from any documents issued by himself'. The Council had also to object, in 1893, to the Official Receiver's having employed 'an unqualified person as Actuary'. Apparently, the offender attempted to justify himself, for a further letter was ordered to be sent 'stating that the main point to which the Council of the Institute took exception was the official recognition *as Actuary* by a Government Department of a person not being a Fellow or even an Associate, and not the employment of any person whom the Official Receiver might

think fit to effect sales or transact other business'. A *contra* item in the account was a complaint in 1899 by the Royal Statistical Society of the unauthorized use of the letters 'F.S.S.' by a member of the Institute in its list. In 1901, a Bill was introduced into the Canadian Legislature 'to incorporate the Institute of Chartered Accountants, Actuaries and Finance'. The Council decided to ask the Solicitors of the Institute for advice upon protective measures, to write to the Institute of Chartered Accountants and to thank some members of the Actuarial Society of America 'for the part which they have taken in opposing the Bill'. A deputation saw the High Commissioner for Canada, Lord Strathcona, and subsequently the Council sent to him a strongly reasoned letter objecting to the Bill. After drawing attention to the powers under the Bill to divide the proposed Institute into three branches, one to be called 'The Institute of Actuaries' and to confer diplomas of Fellowship and certificates of efficiency, the letter referred to the comprehensive influence of the existing Institute, to its overseas membership and to its annual examinations in Ottawa, Montreal and Toronto. The letter continued thus:

To be a 'Fellow of the Institute of Actuaries' with the right under the Charter to use the letters 'F.I.A.' after the name, is highly prized throughout the world.

We therefore venture to hope that your Lordship will be pleased to convey to the Government of the Dominion the strong objections of the Institute of Actuaries to any such incorporation as is proposed and especially on the following grounds:

1. Because to permit the members of the proposed organization to use the name which Her late Majesty gave to the Institute of Actuaries and by which for over fifty years it has been designated and known all over the world, is likely to cause confusion and to mislead, and is unjust to a body which has in many ways rendered service to the public.
2. Because the proposed Bill is not being promoted by any body of actuaries; while the leading actuaries of Canada presented a petition against it.
3. Because actuarial science, far from being merely advanced accountancy as was pleaded on behalf of the promoters of the Bill before the Senate Committee on Banking and Commerce, is a highly technical subject, and it would be dangerous to allow any person except a body of trained actuaries to grant certificates of competency.

Concerted Action re Professional Letters

For these reasons then, and in these circumstances, we hope that it is not unbecoming to express our gratification that the Senate of the Dominion postponed the further consideration of the Bill in question, and we earnestly trust that the Parliament of Canada will not think it right to allow any Bill with similar objects to pass, should one be introduced in the future.

Other Bodies, too, were having trouble with 'Pirates'. In 1887, it was stated that, at a recent meeting of the Council of the Institute of Accountants, a resolution had been passed in favour of the co-operation of Chartered Institutions 'to secure to their members the exclusive right to use the initials which their respective Charters entitle them to use': a conference was suggested. The matter was mentioned again in 1903, when the Institute of Chartered Accountants advocated 'the promotion of a Bill to protect the designations and distinctive letters used by members of various Chartered Examining Institutions'. A Joint Committee was formed of the Bodies interested and the Council of the Institute agreed to expend 'not exceeding £20 towards the furtherance of the objects which the Committee have in view'. A deputation went to ask the President of the Board of Trade for Government support: it received an expression of sympathy, a refusal of official support of the Bill and a suggestion 'that an endeavour should be made to introduce it by a private member'. A sum of £9 was paid at the end of 1904 as the Institute's share of the costs. Attention was called in 1906 to the distinctive letters used by members of a body that was entitled the 'Institute of Accountants'. Apparently, they were adopting the descriptions 'F.I.A. (Lond.)' and 'A.I.A. (Lond.)'. Legal proceedings led to an injunction in favour of the Institute of Actuaries and to the adoption by the offending Body of alternative designations that avoided any confusion.

The due interest of the Institute had to be watched also in the matter of reprints of or from its publications. The Editor of the *Insurance Agent* wrote in 1889 about the 'printing of Commutation Columns etc.' and was 'informed that the Council object to the copying of Tables and other matter from the Institute publications'. In 1898, news was received of a book to be issued in America on Assurance. The publishers of the Institute in London were requested 'not to aid the author or his work in any way and the Hon. Secretaries

were instructed to take steps for protecting the Institute's copyright in the Tables proposed to be published in the book'. Copyrighting was ordered in 1899 of 'every paper to be read before the Institute immediately it is set up in proof'. Acknowledgement was demanded and obtained of the Council's having given permission for various H^M Tables to be included in a well-known collection edited by a non-member and all the publications of the Institute were registered at Stationers' Hall. Despite these precautions, a financial journal reproduced an Institute paper, without permission, in 1912. Reprints of papers were sometimes allowed and on one occasion a commercial firm asked for 300 copies of a paper on Life Premium Book-keeping: it was left to make its own arrangements with the Institute's publishers after the relevant number of the *Journal* had been issued. The Imperial Vaccination League was permitted in 1903 'to copy for lantern slides certain of the diagrams in Mr Burridge's paper on Vaccination'.

It is appropriate, perhaps, in this book to refer to T. E. Young's having been allowed by the Council to dedicate to the Institute his volume on Centenarians.

In 1899, the question arose of continuing Walford's great, unfinished *Insurance Cyclopaedia*. Unhappily, though understandably, the Council decided to inform the publishers that it did 'not see its way to undertake any responsibility either as Editors or otherwise'.

The reduction of postage rates on scientific publications was to be proposed in 1907 in a petition to the Postmaster-General: the Council, 'while sympathizing with the object in view', informed the Institution of Mining Engineers that it 'would not be prepared to take part in a deputation' but would join in a memorial.

When, in 1907, a member of the Council raised the question of publishing in connexion with the volume of *Valuation Tables*, it was made clear that 'each case as it arose would be considered on its merits'. In 1912, the Institute acted as its own publisher in the case of *A Short Collection of Actuarial Tables*.

The administration of the Prize Funds and the offer of Prizes by individuals gave work and some worry to the Council. The subject for the 'Messenger' competition of 1886 was 'Friendly Societies'. The following compressed extracts from the report of the adjudicators show the result:

'Messenger' and Other Prizes

The first essay calls for little comment. It is rather in the way of a readable newspaper or magazine article than a serious attempt to deal thoroughly with the subject.

The second essay is evidently written by someone practically acquainted with Friendly Society business, who, however, has quite failed to deal with the subject in the thorough and exhaustive manner indicated by the Council. Nevertheless, many of the practical remarks and suggestions in this essay are of value and, apart from its flowery language and somewhat rhetorical style, it may hereafter be considered expedient to print the essay in the *Journal*.

The third essay appears to be the result of considerable pains and industry. The historical part is somewhat lengthy and evidently drawn not from direct sources but from a well-known work dealing *inter alia* with this subject. The actuarial part of this essay cannot be said to come up to the expectations formed when the Council decided upon making Friendly Societies the subject of the competition. Nevertheless after careful consideration the adjudicators have unanimously decided to award the first prize of £50 to the author of this essay and not to award a second prize. The adjudicators find the author of the successful essay is Mr G. F. Hardy.

Only a second prize was awarded on the next occasion and in 1901 no essay at all was submitted.

T. B. Sprague offered two prizes in 1886 for essays on 'The Division of Profits'. The announcement was deferred for a time because of the current 'Messenger' competition—two essays were received, but neither was deemed worthy of a prize. A fresh attempt was made with a different subject and the effort was carried through successfully, so much so that one of the joint-winners of the second prize wished to have a large number of copies of his essay. In 1891, 'the Council agreed to comply with his request, provided the publication be made uniform with the *Journal*' and it was added that '750 copies would be accepted with thanks'.

The 'Brown' competition of 1891 produced two essays of equal merit and the Council increased each half-share of the pool from 37½ to 40 guineas. One of the competitors decided to have 50 copies of his own effort: he was offered, at a reduced price, the necessary number of the issue of the *Journal* containing both essays as 'it was thought undesirable to permit of a reprint of [his] essay separately'. So, the authors were undivided even in victory.

In 1894, the Hon. Secretaries submitted a full statement of the Prizes offered by the Council 'up to date'. There had been fourteen competitions, in seven of which no award had been made. After special consideration, it was proposed in 1899 to offer two 'Messenger' Prizes, two 'Brown' Prizes and two 'Chisholm' Prizes. The 'Messenger' competition was deferred until 1901 and failed, but some 'Brown' and 'Chisholm' Prizes were awarded.

It was agreed in 1904 that compound interest at 3% p.a. be credited in future to the 'Messenger' and the 'Brown' funds. Anxiety being felt in 1908 at the 'amount of dividends accumulated in connexion with the Prize Funds', the Examination Committee was asked to consider the offer of further Prizes and it was suggested that some of the non-technical subjects recommended for inclusion in the Examination Syllabus might form suitable topics. In 1911, the matter of further Prizes was remitted again to the Examination Committee.

A collection of the portraits of former Presidents grew substantially during the period by reason of personal and other gifts. A bust of John Finlaison, the first President, was presented in 1907. Donations were received also of other portraits, including those of De Moivre, De Morgan, De Witt, Farr and Halley. In 1902, it was ordered that the names of the donors be affixed to portraits presented to the Institute. A bust of T. B. Sprague was given at this time by the subscribers to a fund raised to perpetuate his memory. The President, in 1888, gave 'a framed copy of Policy No. 974 of the Amicable Society—printed in 1710, for which a special vote of thanks was accorded'. Various other donations came, apart from specific gifts to the Library. In 1899, Mr James Meikle invited 'the acceptance by the Institute of a replica of the statue to the memory of John Napier, erected in Edinburgh by Fellows of the Faculty of Actuaries. The presentation was accepted, with every expression of pleasure and thanks'. An unusual gift was received in 1906 from the 'Assicurazioni Generali' of Trieste, in the shape of 'a collection of its blank forms, literature on the subject of the basis of the calculations used in the conduct of its business and an oak cabinet to contain these documents'. The Hon. Secretaries were 'requested to write a suitable letter of thanks'.

From time to time, but not regularly, Institute Dinners were held: that of 1890 was notable because the Council decided that a formal

invitation be sent to the President, Office-bearers and other members of the Council of the Faculty of Actuaries in Scotland.

Of matters of Finance, the first for mention is the Council's decision in 1888 (rejecting the advice of the Finance Committee) to convert the Consols held by the Institute 'with the bonus of 3s. per cent.' under the Goschen scheme. There was much trouble in the same year over a missing Certificate for Metropolitan Railway Co. 4% Debenture Stock. The Company required, in connexion with the issue of a duplicate, that '3 members of Council should execute a joint and several bond of indemnity'. The President and two others agreed to accept this responsibility and it was 'resolved that a Bond indemnifying these gentlemen should be given by the Institute under seal'. A new certificate was received and lodged with the Institute's Bank. Soon afterwards, the original certificate was found to have been in its custody at all material times 'notwithstanding the assertion of the Bank Manager to the contrary'. The Hon. Secretaries were requested to ascertain the amount of the expenses incurred and to ask the Chief Officer of the Bank for repayment. The Bank agreed and expressed its regret.

Books of account 'as planned by the Hon. Secretaries' were adopted in 1890 and, soon afterwards, forms of Revenue Account and Balance Sheet were approved.

When, in 1896, it was decided that the cards for the 1863-93 Mortality Experience should be insured against fire in the sum of £5,000, the Council ordered that 'the wording of the policy should be amended. The form of the amendment was left to the President and Hon. Secretaries to decide upon'—without regard, if the Minute be construed strictly, to the views of the Insurance Company.

Depreciation of investments led to writing-down in 1907 and again in 1913. An allied irrecoverable item had occurred in 1898, when 'the loss of four overcoats at the Ordinary Meeting on 28th November was reported' and it was agreed 'to compensate the members whose coats had disappeared, for their loss'. The only recorded applicant was granted 'compensation up to an amount not exceeding £4'.

In 1894, the Council 'entertained the suggestion' of a Congress of Actuaries to be held in Brussels. G. King undertook to convey informally to M. Bégault 'the views of the Council on the question'.

This first international gathering took place in 1895 and was followed by a Congress in London in 1898, the year in which the Institute reached its Jubilee. It was then agreed 'that the Institute as a Corporate Body discharge the expenses both of the Reception and Dinner of all the guests whom the Institute may invite'. After the successful end of the Congress, 'the Hon. Secretaries were instructed to convey to the Lord Mayor and the Directors of the Prudential Assurance Company the best thanks of the Council for the hospitality which they had shown to the members of the late Congress'. A sum of £506. 14s. 7d. was ordered to be paid in 1899 'in connexion with the printing and publication of the volume of *Proceedings*'. In 1902, the printers suggested reducing the stock and it was proposed that the Hon. Secretaries communicate with the Permanent Committee in Brussels 'with a view to presenting some of the copies in quires if they desired to have them'.

The Council showed continuing interest in later Congresses and developed an arrangement with the Faculty of Actuaries whereby the United Kingdom acted as a unit in relation to these international assemblies. Interesting, intrinsically, as the details of these matters are, they do not call for mention in this present work.

The final reference, among the miscellaneous subjects with which this section has sought to deal, must be to Actuarial Notation. Although much had been done by the end of the nineteenth century to establish a proper scheme, it was clear that the increase of interest in specific aspects of professional work must lead, from time to time, to reconsideration and supplement. The natural tendency to coin symbols of occasion had to be checked and made effectual. So, in May 1914, a Committee was appointed by the Council to review the notation for Staff Pension Funds. But on June 28, the Archduke Franz Ferdinand was murdered in Serajevo: very soon, the members of the Institute were called to face, with their fellow-Britons, a crisis perhaps foreseen and yet unexpected. The Institute had carried on its proper and engrossing work for 66 years: it was now to pass, like many other well-intentioned organizations, through an ordeal by fire.

CHAPTER VI

THE INSTITUTE OF ACTUARIES, 1914-1948

The War of 1914-19—The General History of the Institute, 1914-48: the Bye-Laws of the Institute and the Procedure of the Council; Premises, Staff and Finance, Meetings and Members; External relations, Miscellaneous matters—The War of 1939-45.

THE WAR OF 1914-1919

Though the people of the United Kingdom felt generally that the war was righteous and were determined to fight it to the end, they were painfully inexpert in appreciating all the demands involved. For a time there was a widespread belief that business should be and could be carried on more or less as usual. The rush to the colours by multitudes of the bravest and the best caused large gaps in the ranks of staffs, but still there was an entirely unfounded idea that the war would be over soon, and strong efforts were made to minimize its effects upon civilian pursuits. Despite the accumulation (almost incredible now) of overseas investments, the nation appeared to recognize instinctively that it depended upon external trade for a great part of its sustenance.

The first decisions of the Council of the Institute reflect this general attitude. In October 1914 questions arising in connexion with the war were considered and it was resolved that the Examinations in April 1915 should take place as usual. At the same time, a list of Members and Probationers serving with His Majesty's Forces was ordered to be prepared—though it was never published—and it was agreed that the salary of the clerk, called up as a Territorial, 'be paid in full during the period of the War'. But as in the community at large, so with the Institute, it was not long before the struggle bit deeply into the tissue of ordinary life. The first death of a member on active service was reported at the Council meeting of 12 January 1915 and thenceforward the casualties were announced in the *Journal*. The proud and dreadful list grew until eighty-two names had to be

placed upon the War Memorial. This aggregated loss made a mark on the Institute that time has not effaced and that no historian can hope to measure. Many of the commemorated would have been still in active association with the Institute and but for clear call and ready sacrifice, some were destined, surely, to exercise great influence and authority among their fellows. The normal use of chronological sequence must give way here and first things must be placed first. In October 1919 the Council requested the General Purposes Committee 'to consider and submit proposals for a Memorial of Members and Probationers who fell in the War'. Suggestions were rejected of stained glass windows and, for a time, of a memorial tablet; it was thought that a vellum scroll would be best. After more examination of the problem, the Council came in May 1921 to the decision that there should be a tablet. The Minute said:

The recommendation that the Institute War Memorial should take the form of a bronze tablet 4 ft. 6 in. in height and 2 ft. 10 in. in width to be fixed in front of the panelling at the East end of the Hall, was adopted. It was resolved that the names on the tablet should be arranged in alphabetical order without military or naval rank but with full Christian names if possible, and that the carrying out of the Committee's recommendation should be entrusted to Mr Waterhouse who was to be requested to submit detailed plans.

A month later:

It was resolved that the inscription on the War Memorial should be as follows:

At the top: 'In memory of the men of the Institute of Actuaries who died for their country 1914-1918.'

At the bottom: 'Their name liveth for evermore.'

By the following October:

It was announced that a tablet in sheet bronze with the names incised and filled with vitreous enamel had been adopted for the Institute War Memorial.

The position of the Memorial in the Hall was considered and reconsidered but, on 14 February 1922, it was agreed:

That the Tablet remain as fixed, and that suitable arrangements be made for lighting.

The Memorial of the War of 1914-19

Despite the decision of the Council, the Tablet records the period as 1914-1919.

At the Special General Meeting on 16 March 1922 there were three short addresses, by the President (Sir Alfred Watson, K.C.B.), by an ex-President (C. D. Higham) and by a young member (Clement Hall) chosen by the Students' Society and himself an ex-Service man. Their words are on record, *J.I.A.* LIII, 99; in this place only the following short extracts can be given:

THE PRESIDENT (*after mentioning the multiplicity of Memorials*): We, nevertheless, must have our Memorial of them. They were a part of our little community, sharing with us the pursuits and interests that bind us together, and by the high courage with which they faced the greater task, and by the sacrifice they made, they have endowed us with a sense of corporate pride to which we must needs give expression. To fight for one's country!—to die in its defence!—what eloquent dissertations, throughout the ages, have been produced upon these themes! But how infinitely different it is from contemplating the supreme sacrifice for country in philosophic abstraction to be brought into contact with it through those who were our intimate associates in our work and in our studies. Not all the ennobling sentiments to which the masters of prose and poetry have given utterance will suffice to express our thoughts and our emotions when we recall, each one of us, some of those whose names are recorded on this Tablet. They died for England! In very truth they died that we might live, that we might hold up our heads as free men, that, undiminished and unsullied, the heritage of liberty which had come to us from our fathers should pass on to our children. Greater even than this—for the fate of England was not the immediate issue—they died to resist the doctrine that might must dominate the world, that power justified aggression, and that, no man hindering, the strong might enslave the weak. Brushing aside all sophistries, and prompt to realize the fundamental issues, masses of our countrymen sprang to arms at the challenge, and none more promptly than the men of the Institute of Actuaries. What they undertook, what they endured, can in no way be so impressively indicated as by the long list of those to whose memory we now do honour.

You are aware that some 430 of our colleagues joined the Forces. Our Memorial Tablet contains 82 names, a high proportion indeed. The cruel toll of high-spirited youth that war remorselessly takes is significantly indicated by the fact that while 6 of the fallen were Fellows and 16 were Associates, 22 of our Students and 38 Probationers lost their lives. Not all were British in the narrower sense of the word. It is an additional bond

The Institute of Actuaries, 1848-1948

between us and our professional brethren overseas that our Tablet includes the names of two Canadians and five Australians. Each arm of the Forces is represented in the list. While, inevitably, the Army preponderates with 76 names, the Navy claims four and the Air Force two.

C. D. HIGHAM: These men we are commemorating are not dead but living, living in the hearts of those they love—not loved—and who love them, living in the memory of the companions with whom they worked in this great city and elsewhere, living in this Hall where they began their studies and went on ever learning day by day. And they live for an inspiration and encouragement to us and to all those who after us shall forgather in this Hall. It is not probable that during my lifetime we shall hear the call again in exactly the same way, but duty has many voices, and I have no doubt that when its clarion does ring out, at whatever time and in whatever manner, this profession of ours of which we are so proud will not fail to respond to its great traditions and once again stand forth as a pattern of unselfishness, of patriotism and of honour.

CLEMENT HALL: It was a privilege to many of us to count as friends those whom we are here to honour to-night, so that in giving expression to our feelings of admiration for them and for what they did, we can do so with the certainty that comes from personal knowledge. Of necessity, the Memorial makes no reference to the individual deeds of valour performed by those whom it commemorates. Those men, I am sure, would have had it so. When the call came to them they went forth, with no idea of personal gain or glory, to do whatever their country in her need might require of them. To them it was sufficient to know that they were doing their duty. That done, they desired no praise.

The names on the Memorial were read and the President unveiled the Tablet 'as a sacred trust, to be held, for ourselves in remembrance, and for future generations of actuaries to show the quality, the patriotism and the strength of purpose, of those men of the Institute who died for their country in the Great War'.

The cost of the Memorial was met by subscriptions from Members and Probationers. A photograph of the Tablet is reproduced here.

When Staple Inn Hall was destroyed and the pitiful wreckage lay heaped for months, grave fear was felt that the Memorial had been shattered beyond repair. In the event, it was recovered unbroken and substantially undamaged, though bearing evidence of its long exposure to damp and dirt. Now, the Tablet rests in the 'New Hall'.

General Effects of the War of 1914-19

The general history of the time is marked by curtailment of the normal work of the Institute. In November 1915, Sessional Meetings were suspended, the Tuition Classes broken up and Examinations, as from 1916, cancelled. Subscriptions were waived in the cases of men away on National Service, but the Council did not accept a suggestion by a Fellow (not resident in England) that the contributions of all members should be remitted for the year 1915-16. A Financial Report made to the Council in November 1915 reviewed the position and discussed the prospect. The subscriptions lost by waiver amounted to nearly £300 p.a.; an increasing shortfall was expected as further enlistments into the Services took place. There is no evidence, however, of any real straitening of resources.

A charming gift from a Corresponding Member in the United States of America was received at the close of 1917 'as an expression of sympathy'. The donor wished the money 'to be applied to the relief of any members suffering as a result of the War or in such other way as the Council might think fit'. The sum sent was transferred to the Insurance Clerks' Orphanage.

In November 1914, the Council gave 100 guineas, on behalf of the Institute, to H.R.H. The Prince of Wales' National Relief Fund. A further patriotic response was made in the spring of 1917, when (though the intention might have been better expressed, even in private Minutes) it was agreed 'that 500 copies (in sheets) of the *Transactions of the Second International Actuarial Congress* be withdrawn from stock and sold, with other waste paper, the proceeds to be given to the British Red Cross Fund'.

Throughout the war, the Council was concerned with various external relations, having the common characteristic of reference to the state of hostility. The subject of War Pensions naturally arose: in November 1916, the President reported as follows:

I had an interview on the above subject with Mr W. Hayes Fisher, M.P., pointing out to him the importance from the point of view of the Institute that the national arrangements for pensions should be carried out with the most careful consideration, with the maximum of simplicity obtainable and the absence if possible of any confusion or division of authority; also with due regard to the actuarial cost to the nation of the benefits awarded, and all proper safeguards against any unnecessary increase of that cost. Mr Hayes Fisher expressed complete sympathy with the attainment of

these objects and said that he hardly saw how at the present stage any further effective action could be taken by the Institute. The principles indicated were in no danger of being neglected, especially as Sir Alfred Watson was in intimate touch with the development and treatment of the problems involved and on his advice the Government relied with the utmost confidence.

The expediency of approaching the Board of Trade on the matter of suspending Life Office Valuations was suggested in November 1915 by the President of the Faculty of Actuaries. 'After some discussion, it was resolved that, inasmuch as the Institute is a scientific body and does not represent Life Offices alone, the Council should not tender any expression of opinion to the Board of Trade unless or until...invited to do so.'

In June 1916 it was thought that the Council might assist the objects of the Central Committee for National Patriotic Organizations by communicating with Corresponding Members of the Institute and members of the profession in neutral countries.

The President was authorized in January 1918 to serve on a Committee appointed by the Ministry of Labour to consider the question of paying a War Bonus to Industrial Assurance Agents.

In November 1919, the Council gave assistance to the Treasury on actuarial questions arising from the Reparation Clauses of the Peace Treaty with Germany.

The Institute took no steps to remove from its List of Members the names of Corresponding Members resident in enemy countries during the War.

THE GENERAL HISTORY OF THE INSTITUTE, 1914-48

This period was not marked by any event of supreme importance in the general history of the Institute. Earlier epochs were different: the formation of the Institute was achieved with dramatic clashes and unresolved tensions; the years of establishment closed with the Scottish secession; the long time of development ended in the reconciliation of the Actuaries' Club and the grant of the Royal Charter; and from 1884 until 1914 the Institute was consolidating its position as a Chartered Body and making itself at home in Staple Inn. It would be wrong, however, to suggest or to suppose that nothing

Elections to the Council

very important happened: the Institute did not rest in unprofitable ease and the account now to be given will show some events of major interest—for example, the admission of women to membership and the discovery of the scope of the profession. Moreover, in educational work there was development of high significance, but that change is described in a later chapter.

THE BYE-LAWS OF THE INSTITUTE AND THE PROCEDURE OF THE COUNCIL

After meeting, for a short period during the war, at two-monthly intervals and adopting the unusual expedient of choosing a new Honorary Secretary from outside its ranks, the Council resumed its regular routine and devoted much thought to the revision of the method of election of its members. In May 1917, a special Committee made a report from which the following extracts are taken:

The Committee were unanimous in the opinion that the present method is unsatisfactory and should be changed, and that an alteration in the Bye-Laws is desirable.

At present the whole of the members, except five annually, submit their names for re-election, and as regards the five new members in place of those retiring by rotation the Council recommends five new names. The members outside the Council thus take no active part in the election. They have the right to erase any names and substitute others but this, as might be expected, is in practice never acted upon; and in the absence of some organized combination would be futile for any practical purpose.

The Committee feel that instead of this it would be better to adopt a system whereby the five rotation vacancies only should be voted upon each year, and that as regards these, some real and practical freedom of action should be given.

The necessary alterations of the Bye-Laws were approved by the members of the Institute and, in June 1918, were allowed by the Privy Council. In consequence, a specific number (five) of members of the Council was to retire each year, the places to be taken by members elected at the Annual General Meeting—every candidate to have been nominated in advance by seven Fellows or Associates (not fewer than four of the seven being Fellows). If sufficient candidates were not so received, the Council would have the duty

of nominating sufficient members to complete the list. The old feature was retained whereby a retiring member of Council, unless he had been co-opted during the year, would be ineligible for election until the next following Annual General Meeting.

These provisions met a definite need and promoted vigorous interest in the composition of the Council. Indeed, a practice began to develop of trying to secure the election of a few particular candidates (or, in the extreme, of one specific candidate) by voting only for them (or him). The Council felt that this practice was undesirable and considered, in 1921, a further change of the Bye-Laws. It was decided, however, that the President should refer to the subject at the Annual General Meeting and make an appeal to members to vote for the full number of vacancies.

The question of introducing postal voting, by members resident away from the area of London, was mooted at the same time but dropped.

The method of selection of the President and his tenure of Office were also reviewed towards the end of the war and during the early post-war years. It was resolved that a President be elected for one year 'without any understanding that re-election for a second year would be recommended'. The task of nomination was entrusted to a Committee appointed for the purpose of considering the filling of vacancies in all the Honorary Offices and of determining the retirements from the Council.

These domestic arrangements have been reconsidered from time to time, and various modifications have been introduced in the hope of securing not only the advantage of stability and experience but also the stimulus and the sustaining vigour of new blood. The only change calling for mention here is that by which an Hon. Secretary reverts to ordinary membership of Council on relinquishing his Office: formerly, he was appointed at once to be a Vice-President and, while so acting, was given, usually, the charge of a Committee or, in succession, of two or even more Committees.

If a casual vacancy occurs in the Council, there is no obligation to fill it before the next Annual General Meeting: the Council considers the matter when it arises. Until this practice was adopted, it had been the custom to co-opt the unsuccessful candidate who had obtained the highest number of votes at the preceding election. Such

Admission of Women to Membership

a member was obliged to seek the suffrages of the Institute at the ensuing Annual General Meeting, perhaps after a very short interval and occasionally with embarrassing result.

The Council has not been unmindful of the fact that the very considerable overseas membership of the Institute cannot be represented directly in its deliberations. As a working body, meeting at relatively short intervals, with numerous Committees busy on various tasks, the Council has had to be composed of members within easy reach of London, and there appears to be no prospect of any such change of circumstance as would make practicable the participation of overseas representatives.

The most important constitutional change during the period 1914-48 was the admission of women to membership. This question had arisen years before—as has been recorded already—but it was understood that the Institute had no power to accept women members and, apparently, there was no strong desire to obtain it. By 1916, the attitude had changed; the opinion of Counsel was taken and, though the matter was deferred for consideration after the conclusion of the war, it was clear that the subject would not be dropped. In fact, a flanking movement was made before the war ended. A member suggested, in June 1918, that 'pending a decision on the general question of the admission of women to the membership of the Institute', they should be allowed to take the Examinations. Some months later Miss Dorothy Davis (the first woman Fellow of the Institute) was permitted to attend the lectures for Parts I and II of the Examinations and, in October 1919, the Council decided to submit the following Resolution to a Special General Meeting of the members of the Institute:

That the Council recommend that women be admitted to the Institute on the same conditions as men and that the masculine shall include the feminine in all the Regulations of the Institute.

At the Special General Meeting, held on 24 November 1919, the President moved the resolution and began his speech thus:

The reasons which had influenced the Council in deciding to bring forward the resolution might be summed up in the words that it was in accordance with the spirit of the times. There was evidence of that in resolutions which had been passed by other Institutions, in the fact that

legislation was contemplated which would have the effect of requiring such Institutions to admit women on the same terms as men and in the example of their sister institution, the Faculty of Actuaries in Scotland, which had already passed a resolution in terms similar to the one before the meeting.

The Resolution was seconded by a member of the Council who said, among other things, that 'the Institute was, in fact, asked to follow the great current of general civilized public opinion' and that 'he did not personally expect a very great incursion of women members for a good many years to come'.

Thereupon, the Chairman of the Committee of the Students' Society voiced the feeling of a considerable body of the members of that Society to the effect that, although the admission of women was not opposed—in fact it would be welcomed—they had some doubt as to the wisdom of taking the proposed step at a time when a modified Examination Syllabus was in force. The Society supported the examination concessions that had been made by the Council, provided that they were extended only to those young members of the Institute who had lost much valuable time through war service—it was not thought appropriate that these concessions should be given, either to women or to other male members coming forward who had not suffered an interruption in their professional preparation. Subject to giving proper and temporary help to ex-Service members, it was desirable that an unimpaired standard of qualification should be required in all cases. The Chairman intimated that he did not intend to propose any amendment to the Resolution, but was anxious that the opinions expressed should be considered in due course by the Council. The motion was carried unanimously and did not involve any alteration of the Bye-Laws.

A curious inquiry was received in 1923 from the Chartered Insurance Institute, which wished to know 'whether the Constitution and Bye-Laws of the Institute of Actuaries were affected by the establishment of separate Governments in Ireland. A reply in the negative was ordered to be sent'.

The Charter and Bye-Laws have been included from time to time in the Institute's *Year Book*—reference to this publication is made in a later chapter.

Further revision of the Bye-Laws took place in 1937, in the

Alterations in Bye-Laws (1937)

circumstances and with the object explained by the following extracts from the memorandum issued by the Council:

As a result of the revision of the examination arrangements now in progress, certain alterations in the Bye-Laws have become necessary. Apart from these alterations, the Council is of opinion that it has become desirable to review the Bye-Laws, as a whole, with the object of bringing them into closer harmony with current conditions and that (since any alteration, however small, has to be submitted to and allowed by His Majesty's Privy Council) this is a suitable opportunity of dealing with the larger problem, which obviously embraces the smaller.

The opportunity has been taken to eliminate from the Bye-Laws a number of provisions dealing solely with the transitional period immediately following the grant of the Charter in 1884.

Efforts have been made in the recommended new Bye-Laws to achieve a greater consistency and clarity in matters of expression than is the case in the existing Bye-Laws. Most of the minor alterations which have been made are due to those efforts.

The principal changes recommended were:

(i) The giving of power to the Council to fill one of the normal five annual vacancies, by its own nomination.

(ii) A provision that, in lieu of or in addition to the Honorary Auditors, a professional Auditor or Auditors could be appointed.

(iii) The raising to 23 of the minimum age for admission as a Fellow. (The Council was of opinion that, in view of the very important statutory duties that a Fellow of the Institute might be called upon to perform, the existing age of 21 was too low. It was understood that the Faculty of Actuaries was making a similar change.)

(iv) The conferring upon Students of permission to take part in discussions—by right, at Ordinary General Meetings or, by invitation from the Chair, at Annual or Special General Meetings.

(v) A power to the Council to waive payment of any further annual subscription by a member who attained the age of 70.

(vi) Specific inclusion of the President and the Vice-Presidents in the existing indemnity to Officers.

The proposal that the Council should have power to choose one of its members by mere nomination, though approved by the Institute at the Special General Meetings, was withdrawn on the Privy Council's ruling that the Charter did not permit such a provision to be made.

In 1943, questions occurred about the powers of discipline possessed by the Institute over its members. After long consideration of the subject, it was decided by the Council that steps ought to be taken to make such powers more comprehensive, more elastic and more in line with those in force in other professional bodies. The alterations were allowed by the Privy Council in 1946 and there is now a duly constituted Professional Conduct Committee that would investigate any complaints. Happily such incidents are very rare; the Committee has also the positive function of considering cases in which individual members desire guidance. A few general canons of professional conduct have been formulated by the Council during the past 25 years and are published in the *Year Books*. The aim throughout has been to guide and to trust—not to command.

PREMISES, STAFF AND FINANCE

The premises were enriched during the years 1914-48 by various gifts and also by articles of association-value committed by the owners to the safe-keeping of the Institute. Thus, in 1918, the Prudential Assurance Company asked the Council to agree 'to the placing of a pewter dish for preservation in the Hall'. The Council consented and thanked the owners for the suggestion. In 1923, a notable gift was received, as the following Minute shows:

Sir Joseph Burn, K.B.E. on behalf of the Directors of the Prudential Assurance Co. presented to the Institute a mace, formerly in the possession of the Ancients of Staple Inn, bearing the following inscription:

'The Ancient Socy. of Staple Inn 1553,
Hutton Wood, Principal 1816.'

The Council were informed that there were no available records of Staple Inn to indicate the special significance of the date 1553, which was the year of Queen Mary's Accession to the Throne.

It was unanimously resolved:

That the Directors of the Prudential Assurance Co. be thanked for the gift which is much appreciated by the Council and will be valued by them.

It was understood that, in making the presentation, it was the desire of the Directors that the Mace should always remain associated with the Hall.

The Mace was not damaged when the Hall was destroyed.

Staple Inn Hall: Repairs to the Roof

New rooms were acquired in 1929 at No. 1, Staple Inn and, so, much-needed accommodation was secured for Committee Meetings and for the Assistant Secretary. A. D. Besant presented a clock for use in the Committee Room: the Council expressed 'its warm appreciation' and 'accepted the gift with much gratitude.'

In 1932 'attention was drawn to the acquisition recently by the Law Society of certain pieces of Staple Inn pewter'. Two members of the Council 'intimated their willingness to make informal inquiries as to the possibility of obtaining the pieces either on loan or by purchase': they failed, not having known, presumably, that the pieces had been given to the Society.

An antique brass inkstand was given by G. S. W. Epps in 1933 for use in the Committee Room 'and the Council's appreciation was cordially expressed'. The same donor presented in 1944 an engraving of Staple Inn Hall, reproduced as an illustration at p. 134.

An interior view of the Hall, as it was in the early days of the Institute's occupancy, appeared as a frontispiece to *J.I.A.* xxvii, and shows the bookcases along the side walls. Later, there were some bookcases against the panelling of the dais, but, in 1916, they were moved to the New Hall. The other bookcases were placed in the cloakroom in 1919.

Despite the former Minute on a general refusal of requests for the loan or letting of the premises, the Council agreed, in 1915 and on several occasions afterwards, to allow outside Bodies to hold meetings in one or other of the Halls. One of the successful applicants was the Shakespeare Reading Society—an example of impartiality on the part of the Institute regarding a controversy with which it might perhaps be thought to have been concerned.

Extensive repairs had to be made to the roof of the Old Hall in the winter of 1922-3, because of the ravages of the death-watch beetle. The President referred to the subject at the Annual General Meeting in June 1923, thus:

During a portion of the year, the members had been deprived of the use of the Hall, because it had been found necessary to carry out very important restoration work. He was sure everyone very much appreciated the fact that that work had been carried out without altering the character and the appearance of the Hall. A great deal of concealed woodwork had been replaced by steel girders, which were continued upwards between

The Institute of Actuaries, 1848-1948

the ceiling and the roof, the roof being, he believed, 18 inches higher than it was originally. The beams that were visible were now bolted to the steel girders. The result was that the roof was now supporting these venerable beams which for nearly 400 years had supported the roof.

The Institute's lease expired at Lady Day 1924 and was renewed with the same generous consideration that had marked the landlords' attitude throughout.

In 1932, the Institute received from W. P. Phelps, an ex-President, the outstanding gift of a new Council table and chairs. They were offered with charming simplicity: 'I had long considered that the Council Table and Chairs were quite unworthy of so important a body as the Institute of Actuaries.' The President described the table and chairs at a General Meeting, in terms recorded in *J.I.A.* LXIV, 12. The following extract is reproduced:

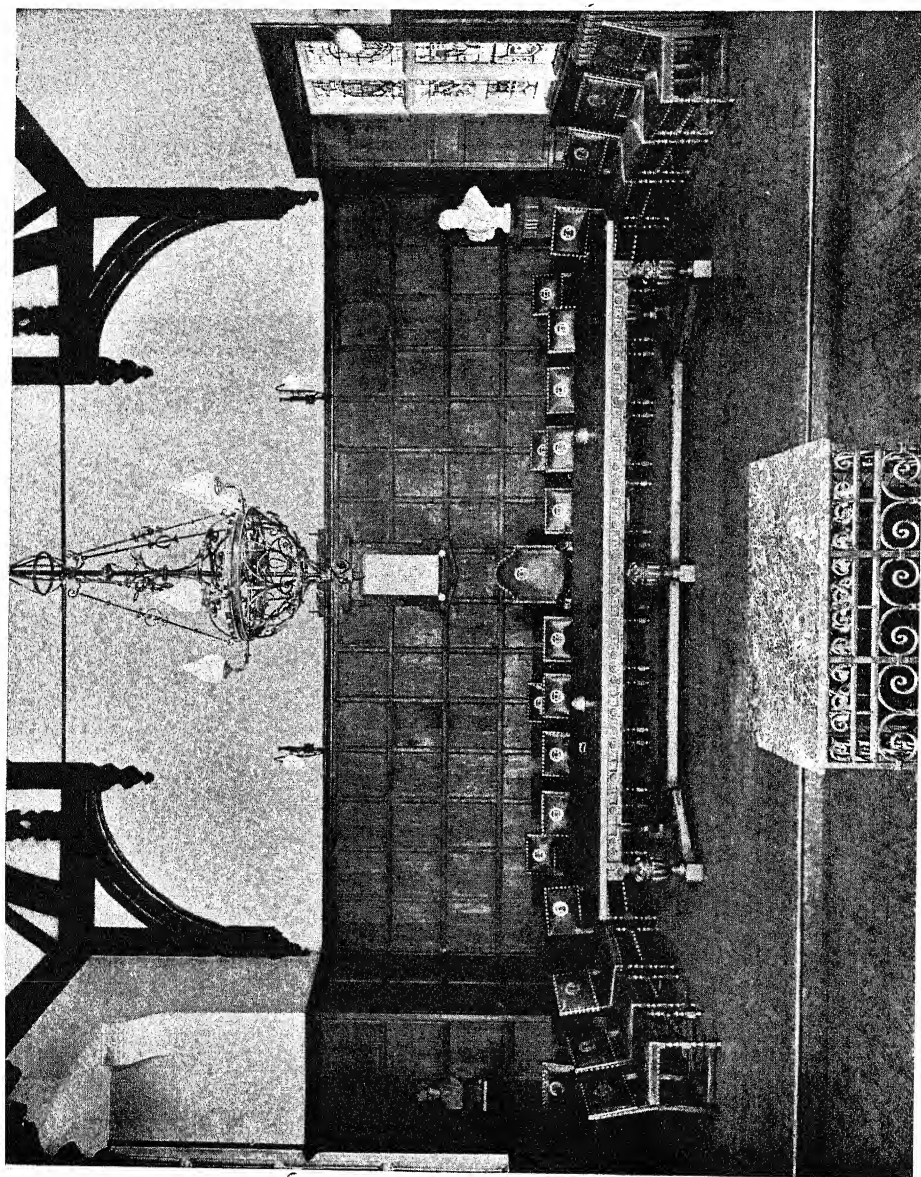
The table was made specially to Mr Phelps's design by the Namore Company. It was a refectory table, based on an original Elizabethan example used, it was believed, in the dining hall at Moreton Hall, Cheshire, the under-structure being slightly altered. Four of the legs of the table were old, and the other two, though not old as legs, were made from a beam taken from an old Inn *more than four hundred years old. The frieze under the edge of the table was copied from the carving under the gallery of the Hall, so that in that way the table was linked up with the Hall in which it was to 'live'. The top, seventeen feet long, was made of oak hewn from Windsor Forest, he believed during the War by Canadian woodmen. It was two inches thick in one-length planks.

The chairs were Cromwellian in style, but were more comfortable than those which would be found in South Kensington. It was thought by Mr Phelps that a design stamped in gold on the leather would add something to the attractiveness of the chairs, but, unfortunately, the badge which appeared on the outside of the *Journal* of the Institute did not lend itself to being incorporated in a die for use with leather, so that the insignia of Staple Inn had been used instead.

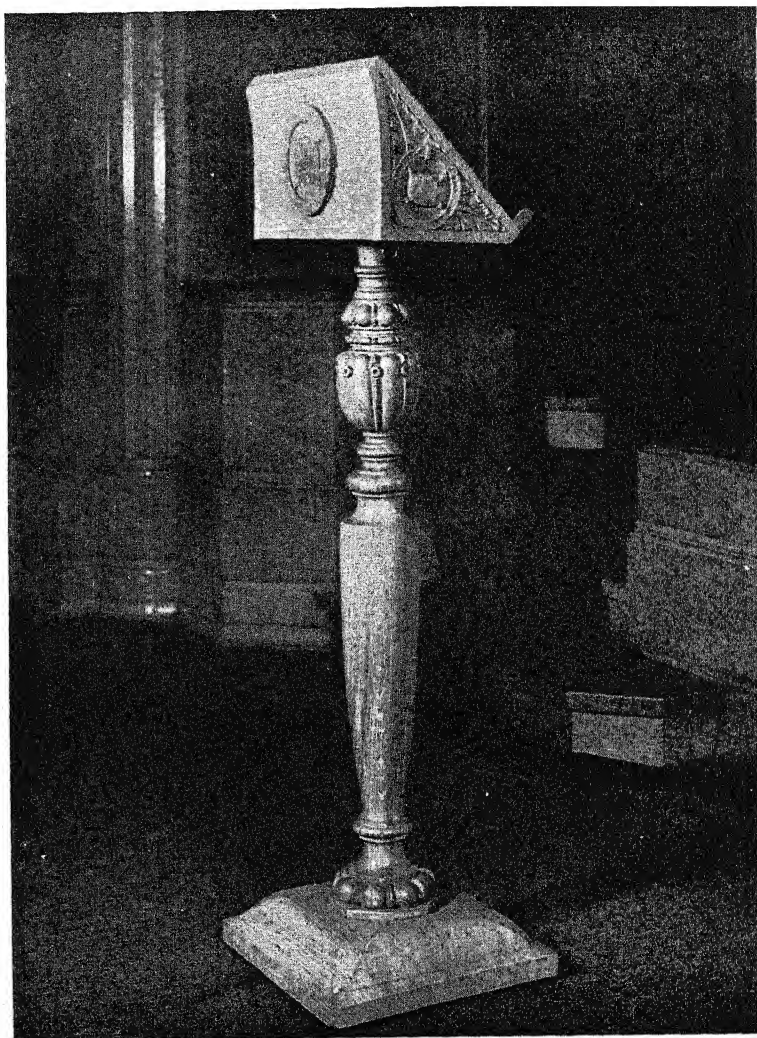
The coming of the Phelps table and chairs led the Council to improve the lighting of the Hall. Cornice lamps were installed and six of the existing brackets were converted at a cost of £171. 5s.

A further extension of premises took place in 1937, when the Institute obtained a lease of the upper eastern portion of the Holborn frontage. This section of the Inn, famous for its typically

* The original memorandum says 'dating back nearly 400 years'.



THE 'PHELPS' GIFT—AS IT WAS



THE 'LEVINE' LECTERN

Enlarging Occupancy of Staple Inn

medieval style, had been affected by the death-watch beetle so seriously that the whole of the internal structure had to be renewed. Fortunately, it was found possible to preserve the façade. In consequence of these large repairs, the rooms became available and the owners placed the Institute still further under an obligation of gratitude by giving to it the chance of taking a lease. The new accommodation provided offices for the Actuarial Tuition Service (a joint undertaking of the Institute and the Faculty of Actuaries) as well as a Students' Reading Room and some space for another development that was expected to be made after a few more years.

This lengthening and increasing settlement in Staple Inn was interrupted—not wholly and, it is believed, not permanently—by the dread stroke of war. The Annual General Meeting of June 1944 was the last occasion on which the members were able to gather under the old roof. But for a few, charged at the time with administrative responsibility, there was one more occasion. Not long after the Annual Meeting, they attended an informal tea-party. It had been arranged for the discussion, with Mr and Mrs Levine and those immediately concerned in the work, of the best way in which to give effect to Mr Levine's wish to present a lectern to the Institute. The design was considered in and with respect to the Old Hall. A few weeks later, it was gone, but the lectern was made and, at the Sessional Meeting on 22 October 1945, it was used for the first time, elsewhere. The gift has thus a special commemorative function and interest. As was said at the meeting:

The Old Hall is no more—our new home is not yet even in prospect—but when it comes into being, this lectern will have an honoured place and will be a fitting link with the Hall in which it can never stand.

The lectern was designed to be in harmony with the architectural period of the Hall of Staple Inn, the motif being taken from the supports of the Council table. The design of the upper part of the shaft of the lectern is adapted from the carving of these supports, and the motif is repeated in the stand below the tapering shaft. The woolsack, the emblem of the Inn, is introduced into the carving at each side of the book-rest, and in bas-relief at the back in order that it may be seen from the body of the meeting. The illustration, reproduced here, is taken from *J.I.A.* LXXII, 445.

As regards the staff, the period is notable chiefly for the continuance, until 1939, of S. H. Jarvis in the office of Assistant Secretary. Very much could be said of his unique work and influence: here, the record must be comparatively brief. In 1932, the President mentioned to the Council that Jarvis had completed 40 years of service 'for nearly 30 of which he had been Assistant Secretary. The Council resolved unanimously to offer its cordial congratulations to Mr Jarvis' and to mark the occasion by giving a substantial honorarium. 'The President, in intimating the Council's resolution to Mr Jarvis, referred to the very happy relationship that had existed for so many years.' Amid all the mounting anxieties of the year 1939, the members of the Institute turned aside to the pleasant but regretful task of bidding Jarvis cordial farewell. A *Conversazione* was held in the Connaught Rooms on 6 July and attended by some 350 members and ladies. The President, addressing the company as 'friends of Jarvis', paid a great tribute to him in a speech from which the following is extracted:

I think that we all regard Jarvis and Staple Inn as inseparable, and Staple Inn will not seem the same without him. For forty-seven years he has been going in and out, faithfully serving our profession. There are some here who have known him for the whole of those forty-seven years; others have known him for lesser periods, but in such cases for the whole of their professional lives.

Jarvis has done most wonderful work, and increasing work, all through the years. During the time that he has been with us the Fellowship has trebled, and there have been various innovations which have thrown a great deal more work upon him—the Students' Society, the Mortality work, the Actuarial Tuition Service, to mention only a few—but, whatever work there has been, Jarvis has always risen to the occasion, and he has never grumbled at the extra work thrown upon his shoulders.

I was somewhat amused this afternoon when he reminded me that although for forty-seven years he has been arranging tea for the members at their meetings and for the Council, this is the first occasion on which we have stood him tea. We are delighted to see him this afternoon, for we felt that we should arrange such a meeting as this. True, the Council has expressed appreciation to him, and I hope he is satisfied that the treatment has not been ungenerous, and various members at various meetings have on many occasions, and especially during the last few years, expressed great appreciation of his services; while in the last few months the professional dining clubs have honoured him by making presentations and,

Retirement of S. H. Jarvis

what I know he will value far more, have given him the honorary membership of those clubs.

I am going to ask Jarvis to accept this envelope on behalf of you all. It does not, as you may think, contain a cheque; it contains an order on Messrs. Coutts & Company authorizing our friend Jarvis to deal as he wishes with the fund which has been subscribed; no more, no less. We have made no attempt to round it off, it is the exact fund as subscribed, and this morning Messrs Coutts advised me that the amount standing in that fund had reached the figure of £487. 9s. 11d. with a few items yet to be cleared from overseas, so that he should not have much less than £500 to send him on his way rejoicing.

Turning to Mr Jarvis Colonel Oakley continued: Our old friend Jarvis, on behalf of all your friends in the Institute—and there are many spread throughout the world who, though not here in the flesh, are here in the spirit—I thank you for all your magnificent service. We esteem your sterling character and your friendship. We wish you well. We wish you many happy years of health and happiness with Mrs Jarvis, with many happy memories, and among them we hope there will be the memory of this evening as the consummation of your life's work, well done and greatly appreciated.

Jarvis responded, after prolonged applause, in happy yet moving words that included an interesting reference to his almost accidental and certainly temporary original engagement:

Having said, very inadequately, grace for all the blessings that have been bestowed upon me, I should like to add that I consider myself a much favoured individual. There cannot be many men whose good fortune it has been to be launched into retirement on a crescendo of festivities, leading up to a treble forte gathering like this, which, it might be said, marks the end of a temporary engagement for a few weeks begun in May 1892. Had I then been a few months younger, it is possible that by now I might have been already a pensioner of one of the large composite offices. It was from an interview with the actuary of the company, who was at the time an Honorary Secretary of the Institute, that my steps were providentially directed towards Staple Inn Hall, where in the service of the Institute I have been privileged to enjoy the friendship of the members for so many years.

His successor, A. D. Dale, the present Assistant Secretary, joined the service in 1929 and thus had some ten years of apprenticeship before being called to take up the work laid down by S. H. Jarvis.

It is not fitting here to do more than to record the simple fact that the Institute continues to be most well and truly served.

Financial and other allied matters require but brief mention. In the years immediately following the War of 1914-19, the Institute was still feeling its effects, as this extract shows from a report of the Finance Committee:

The general position as regards income and outgo was considered and even allowing for economies in printing the *Journal* and the increase in prices charged for publications explained below, it is probable that for a few years the expenditure will exceed the income.

Considerable increases were made then in the prices of several of the Institute's publications, but costs continued for years to be a subject of anxious inquiry.

In April 1920, it was decided 'that all the Stock Exchange securities included in the list of assets as at 31 March 1920 be sold and the proceeds reinvested in short-dated securities'. A month later, a loss of £983. 19s. 3d. was reported 'on the recent sale'. The total loss brought into the accounts for the year ending 31 March 1921 was more than £1,088.

The Council agreed in 1924 to rescind a Minute of February 1890 and so to allow Associates over the age of 45 to commute their subscriptions. The approved scales for Fellows and Associates were ordered to be published in the *Journal* and future notices regarding subscriptions were to include an intimation that terms of composition would be quoted by the Assistant Secretary to applicants.

From time to time, the form of the accounts was reconsidered and, in 1938, Messrs Deloitte, Plender, Griffiths and Co. were commissioned to make an investigation of the system of book-keeping and of the statements published. As a result of their report, revised methods and forms were adopted. Soon afterwards, the firm was appointed to be professional auditor to the Institute and so a step was taken that had been made possible by the change of the Bye-Laws in 1937.

Special Meetings and Lectures

MEETINGS AND MEMBERS

During the War of 1914–1919, there had been a few meetings: S. G. Warner as President gave an address to open each of the shadow-Sessions, 1916–17 and 1917–18, and one or two prominent non-members had spoken on special subjects. Early in 1919, a discussion was held on Aviation and Life Assurance. Some of these addresses and discussions were not reported in the *Journal*. Efforts were made, also, to establish the practice of holding courses of ‘Post-Graduate’ Lectures. Several series were given in the years immediately following the war, e.g. on ‘Foreign Exchange’ by E. H. Lever and on ‘Reversions’ by F. L. Collins.

In 1922, the Council terminated the arrangement whereby discussions at Sessional Meetings were reported by one of the Insurance Papers, and substituted direct engagement of a shorthand-writer.

Any temptation of an author to take literally the announcement that his already printed paper would be read before the Institute was removed by the introduction of synopses. These short summaries could be circulated in advance to members generally, without incurring the considerable and partially wasteful expenditure that such full issue of the complete papers would involve. Thus, the area of interest in each meeting was widened and it became natural that the author should confine himself either to reading the synopsis or to making an introductory speech of equivalent length. A valuable development has occurred, by the publication of these synopses in the *Year Book*, among the ‘Proceedings of the Institute’. The practice was begun in the issue for 1934–35.

The first woman Fellow of the Institute was invited in 1926 to open the debate at a Sessional Meeting and thus a new precedent was made.

In 1930, Dr J. F. Steffensen delivered at University College, London, a series of advanced lectures in Statistics. The distinguished author (a Corresponding Member for Denmark) graciously presented the copyright to the Institute and the lectures were published accordingly under its auspices.

A member having complained of editorial alterations of his forthcoming paper—a situation reminiscent of the days of T. B. Sprague—it was decided ‘to consider the method to be adopted in future when

notifying authors that their papers are being accepted for presentation at a Sessional Meeting'. Consequently, the Council resolved in 1932 that the responsibility of receiving and approving papers for submission at the meetings should be placed on the Scope of the Profession Committee, which had hitherto only made recommendations with regard to Authors and subjects. It was realized that under the new procedure longer time would have to be given to the consideration of papers and that probably it would not be practicable to issue an advance programme of the meetings.

In 1935, a discussion on Industrial Assurance evoked outside interest as well as questions from members regarding communication by them of views to the Press:

It was decided to inform the insurance papers that a print of the discussion as it will appear in the *Journal* will be available in a few weeks' time when copies will be sent to them on this occasion, and to intimate to the Press generally that, while the Institute cannot undertake to supply reports of the discussions, the attendance of representatives at the meetings will be welcomed. The Council saw no objection in principle to individual members communicating to the Press notes of any remarks they may have made in the discussions at the Institute meetings.

And, in 1937:

The Scope of the Profession Committee was asked to consider and to report to the Council what steps can be taken to secure adequate publicity for the papers submitted at the Sessional Meetings of the Institute.

The first reference to Members (a subject that—save for war losses—is treated here with regard to the years 1914-48 as a whole) must be to the G. F. Hardy Memorial. Hardy died in October 1914 and was commemorated first by an article (*J.I.A.* XLIX, 1) written by his close personal and professional friend, G. J. Lidstone, with an Addendum (*J.I.A.* XLIX, 178) by Sir Lionel Abrahams, K.C.B., of the India Office. These documents give a picture of and pay a fine tribute to, the attainments and the memory of a great man. As Lidstone said: 'By his death the actuarial profession loses one of its brightest ornaments and many of its individual members one of their dearest friends. His position in the profession and his influence on its scientific development were perhaps unique. . . a brilliant example and a very dear memory.' It was felt, widely, that something more was needed

The G. F. Hardy Memorial

to perpetuate the name of such a member. So, the Council arranged for a bust to be executed by Mr Gilbert Bayes and also issued an invitation to the members to subscribe towards a Memorial Fund. A Special Meeting of the Institute was held on 11 January 1916, 'for the purposes of receiving the dedication of the Memorial Fund' and of witnessing the unveiling of the bust (which was recovered, substantially undamaged, after the ruin of the Hall). It is recorded that 'the attendance—representative, so far as the circumstances of the times permitted, of all classes of members—bore witness to the respect and affection with which Sir George Hardy was regarded by the profession'. His widow was present and it was announced that she and other members of the family had given generous donations to the Fund.

The dedication was made in the following terms:

To the President and Council of the Institute of Actuaries.

The Committee which was formed to raise a Fund in commemoration of the life and work of the late Sir George Hardy, K.C.B., having now brought its operations to completion, hands to the Institute of Actuaries as the result:

4½ per cent War Loan Stock	£700	0	0
Cash	£67	15	9
	£767	15	9

The response to the appeal has been a thoroughly representative one, 137 contributions having been received, 125 of which are from Members of the Institute of Actuaries in Great Britain and the Colonies.

The Fund has been raised in order that the annual income arising therefrom be applied for the assistance of actuarial education and research among the younger members of the profession, in such ways as may from time to time—in its administration by the Institute of Actuaries—be deemed most effective.

It is, therefore, now handed over to the Institute in trust for these purposes; to be known as 'The G. F. Hardy Memorial Fund'.

It is impossible to reproduce much of what was said, with eloquent sincerity, of a lost leader; the short extract following must stand for it all:

The patience, so kindly and unfailing, with any honest effort, however poor or limited; the guidance over rough places and through dark passages

so constant and so sure; the generosity so ready to appreciate and rejoice in any success, however modest—these were the things that recurred to their minds. These things now, and happily for many years to come, were living memories. They influenced the spirit and the activities of those who still remain.

But the time would come when they would be forgotten, and their science would endure. It would have new votaries and new students; and in their science, as in all others, the pathway of the student and beginner became more difficult as years went by. Fresh accumulations of knowledge and research had to be absorbed; new methods had to be comprehended and mastered. It was because they felt this, and because they knew how strongly he whom they now commemorated felt it and endeavoured to meet that want, that they had tried to establish something which should be, from year to year, some source of help and encouragement not only to the present generation of students but to those yet to come. They had endeavoured, by a certain elasticity in the principles on which it was based, to give it a form which would enable its particular application to be varied from time to time as circumstances changed; thus preventing the evil which sometimes came from too rigid a constitution—good enough at the beginning, but eventually an obstacle to usefulness. In this way they hoped to have achieved a work which would be lasting and beneficial. And they had secured this—that for all time, as long as their science and students of it endured, one great and illustrious name would be associated with thoughts and ideas of help and of encouragement, and that they had been enabled to join together in this effort and to link with it the name of so great a teacher, so great a guide, so great a friend, would, by subscribers and Committee alike, be held in record as a high honour and treasured as an abiding satisfaction.

In 1917, the Council was informed that, by his will, an Associate (A. J. Cook) had bequeathed to the Institute a share of the ultimate residue of his estate for the furtherance of the objects of the Hardy Memorial Fund, which received thus a sum of £135. 11s. 3d.

In addition to the immeasurable losses caused to the Institute by the death of the eighty-two members whose names are recorded on the Memorial of the War of 1914-1919, there were others that stand out for notice. T. B. Sprague died in 1920, full of years and honour. The Council placed on its Minutes the following tribute:

The Council of the Institute of Actuaries has learned with deep regret of the death of Dr Thomas Bond Sprague. A Fellow of the Institute for

T. B. Sprague

the long period of 63 years, Dr Sprague was conspicuous among those eminent men to whose exertions the growth of actuarial influence and authority during the 19th Century is to be attributed. A scholar of great attainments, he freely placed his knowledge and the results of his scientific labours at the command of his profession, contributing largely to the development of the theory of life contingencies and the methods of its practical application. He served the Institute in many capacities and was elected President in 1882, holding that office, with distinction, for four years. Dr Sprague was not only a distinguished Actuary but a great force in the promotion of actuarial science.

A long Memoir by G. King was published (*J.I.A.* **LII**, 241), from which the following passages are taken:

Dr Sprague was a man of action, whose actions were governed by theories formed after viewing the questions impartially, from various sides, and which were then tested practically, and proved to be sound. He possessed a great intellect, almost irresistible force of character, and unwearying industry, all combined with straightforward honesty of purpose, and candour in everything he said, or wrote, or did; and he had complete self-confidence without self-conceit or undue self-esteem. He formed strong opinions, which he maintained with outspoken vigour against all opponents; but he was always willing to reconsider these opinions when necessity arose as a result of further investigations; and, when convinced that to change an opinion was the right thing to do, he frankly acknowledged the change, and was ready to state the reason why. It must be admitted, however, that he was sometimes rugged, and a little aggressive, and not always easy to get on with; and his earnestness led him on rare occasions to be perhaps over-vehement in his expressions. He had no thought of being personally discourteous, or of hurting the susceptibilities of those to whom he was for the moment in opposition. The opinions were attacked, and not the persons. These characteristics come out clearly in his voluminous writings, and more particularly, in his Presidential Addresses.

During his long connexion with the Institute of Actuaries he was to a large extent its guiding spirit, and he did much to mould its destinies, and to bring it up to its present position of world-wide influence.

Sprague was both Senior Wrangler and First Smith's Prizeman at Cambridge; he is unique in actuarial circles in having been President not only of the Institute but also of the Faculty of Actuaries. Among his other and tremendous claims upon the memory of his profession

must be placed the persistent and practical advocacy of his own form of phonetic spelling, with which the pages of the *Journal* are sprinkled liberally. In 1902, to mark his retirement from active work, a bust executed by a Scottish sculptor, Mr MacGillivray, had been placed in the Hall. 34 years later, another bust, of W. S. B. Woolhouse, Sprague's opponent in controversy on 'Graduation', was presented to the Institute by C. R. V. Coutts.

George King died in 1932 and, so, the Institute lost a man known far and wide for his extraordinary labours. A short personal Memoir was published (*J.I.A.* LXIII, 528) and, by order of the Council, a longer account dealing with his work (*J.I.A.* LXIV, 241).

There were other losses, not in the fullness of years. In 1926, both R. Todhunter and A. Henry passed on—the former in a mountaineering accident in Central Europe and the latter through suddenly revealed disease. Both were outstanding actuaries: Todhunter had come to his maturity, but Henry, despite his already great achievement, gave sure promise of development still to be made clear. The two Memoirs, by D. C. Fraser and A. W. Watson respectively, appeared together (*J.I.A.* LVII, 338, 347) and in them is apparent something not only of the men themselves but also of the loss that their going brought upon the profession. It is not possible even to estimate the value of the further service that Henry would have rendered in the domestic life of the Institute and in the larger sphere of Government administration.

Between the Annual Meetings of 1935 and 1936, four past-Presidents died: H. Cockburn, C. D. Higham, F. Schooling and Sir Alfred W. Watson. Each had achieved professional distinction in his own way, but Sir Alfred Watson left a special mark because of his outstanding work and influence as the first Government Actuary of modern times. An obituary notice by C. R. V. Coutts was published (*J.I.A.* LXVIII, 1) and, quite recently, an anonymous gift of £500 was made in memory of Watson, to be used in such way as the Council should think best for the extension of the scope of the profession, with reference particularly to the interests of the younger members. It was decided to establish a series of 'Watson Memorial' Lectures, to be given before the Institute by leaders of various industries. The first lecture was delivered in 1946 by Sir William Wood, President of the London, Midland and Scottish Railway, and at this and the subsequent lectures there has been evident keen interest by the members

for whom the course was founded, and by the lecturers themselves in the relatively strange company to which they have been introduced.

Only a fraction of the tale of loss can be recorded here—many who served the Institute in their day and generation with great ability and unflagging zeal must be left out. But one more must have brief mention for his quiet, sure influence and his high personal worth: Henry Brown, who came late into the counsels of the profession, but who showed in his Presidential Address strong, commanding evidence that he had reached his rightful place. Stricken by grave illness during the term of his office, he recovered and came back into the current of the Institute's life, but it could not be for long: he died in 1943 and has had fitting tribute paid by G. Green (*J.I.A.* LXXII, 130).

This chapter has been, in great part, a record of mortality and, though a sense of loss must be felt, especially by those who were privileged to know some or all of the departed, the abiding memory is of the value of the work done and of the stimulus given to the life and effort of the Institute.

In 1919, a suggestion was made that medals be awarded 'for work of outstanding merit in matters connected with the profession'. So important an innovation needed to be introduced with proper care and the following regulations were adopted:

1. That a Gold Medal of the Institute be given on such occasions as the Council may deem fit.

2. That such medal be given only to commemorate work of outstanding originality in actuarial science.

3. That a medal may be given for any paper or treatise which advances actuarial science, whether published through the *Journal of the Institute of Actuaries* or elsewhere and whether the author is a member of the Institute or not.

4. That no medal shall be awarded unless nine-tenths of those present at a Council meeting, of which and of the subject to be discussed due notice has been given, vote in favour.

It is a curious fact, confirmed by the Institute *Year Book*, that, though three gold medals have been conferred, none of them was awarded under these Regulations. To quote from the *Year Book*:

In 1927 a gold medal was presented to George King, a Fellow of many years' standing, in recognition of the long and distinguished service

rendered by him to the Institute of Actuaries and to actuarial science (*J.I.A.* LIX, 1).

In 1929 a gold medal was presented jointly by the Institute and the Faculty of Actuaries to George James Lidstone, LL.D., F.R.S.E., a Fellow of the Institute since 1892, and a Past-President of the Faculty, in recognition of his unique services to actuarial science (*J.I.A.* LXI, 1).

In 1937, a gold medal was presented jointly by the Institute and the Faculty of Actuaries to Sir William Palm Elderton, C.B.E., F.I.A., F.F.A., a Past-President of the Institute, in recognition of his distinguished services to actuarial science (*J.I.A.* LXIX, 1).

Replicas in plaster of the Lidstone and Elderton medals (both of which had been executed by Mr Gilbert Bayes, the eminent sculptor) were displayed in the Hall. When it was destroyed, the replicas were lost, but happily, it was found possible to get new copies. A silver-gilt replica of the Lidstone medal was obtained in 1930 'at the request of the Trustees of the British Museum for inclusion in their collection of English personal medals'.

G. J. Lidstone presented to the Institute, in 1933, his collected actuarial and mathematical papers in three volumes and added a fourth in 1942.

The general problem arose again, during the period under review, of young entrants who, for various reasons, found it difficult or impracticable to make progress in the qualifying examinations. It was decided in 1929 that the Council should review the list of Probationers who had remained on the list for 4 years and the hope was expressed, in 1930, that 'the revised regulations for the admission of Probationers would result in time in the elimination of unsuitable candidates'. The new rules made it clear that the Council proposed to enforce removal from the list at the end of 4 years, unless, in special cases, sufficient cause for retention were shown. In 1933, a considerable number of such Probationers asked for an extension of time, which was granted on the basis of 2 years if the applicant had not sat for the examination more than twice, or of 1 year in other cases. A similar practice was ordered to be followed for the future on reasonable cause shown. As a consequence of the comprehensive revision of the educational system of the Institute, admission to the Class of Probationer ceased on 31 May 1937.

Election of Two Hon. Fellows

After the very successful International Congress of 1927, held in London, the Institute, in 1928, conferred Honorary Fellowship on Mr E. E. Rhodes, President of the Actuarial Society of America and on Mr J. G. Parker, President of the American Institute of Actuaries. A change of Bye-Laws had to be made for the purpose, because, as they stood, there was no power to elect as Honorary Fellow an Actuary outside the British Empire.

A strange request, for reinstatement as an Associate, was refused in 1931: the applicant had resigned from that Class in 1886.

The Institute had been forming, over many years, a collection of portraits of its past-Presidents, but, when special efforts were made, in 1932, to fill gaps in the series, no picture of the first President, John Finlaison, could be found. In 1945, however, a portrait was obtained.

EXTERNAL RELATIONS

It is proposed here to mention only a few of the more interesting and significant of the many contacts that occurred during the years 1914-48.

Despite, perhaps because of, the stress of war, advocates of Decimal Systems continued to bring their views to notice and attempts were made, without success, to secure the support of the Institute. In October 1918, a Royal Commission on Decimal Coinage was announced and three leading actuaries were appointed to be members. Even so, the Council declined to give evidence.

At the General Meeting in December 1918, the Council submitted 'a resolution of fraternal greetings and congratulations on the conclusion of the War, to be offered to the Actuarial Societies in the Allied countries'.

The Royal Patriotic Fund Corporation renewed its request for actuarial advice and the Council had the pleasure of arranging for this help to be provided as occasion arose throughout the period.

In June 1919, the Royal Statistical Society invited various other bodies to become associated with it and to nominate a representative for election to its Fellowship. The invitation was accepted by the Council, which agreed soon afterwards to support a petition by the Society to the Government 'asking for the establishment of a Statistical Department with a view to the better co-ordination of

Government Statistics'. A long interval of apparently quiescent relationship followed until, in 1944, activity broke out, in connexion particularly with this subject of Government statistics. The Society had submitted a Memorandum on Official Statistics to the Government and it was felt by the Institute to be necessary and proper to emphasize the position of actuaries with regard to training in Statistics and to their fitness for statistical posts. This feeling was reinforced by consideration, firstly, of the existence and standing of the Government Actuary's Department; secondly, of the distinguished service of various actuaries in Government statistical work during the War of 1939-45 (and in the previous war) and thirdly, of the Institute's long and successful record of educational work and rigorous training. The Society proposed to initiate examinations for a Diploma in Statistics (with a Certificate as a junior qualification) so as to confer what it termed a hall-mark. The Institute of Actuaries was not opposed in any way to these efforts, which indeed it welcomed, provided that the statistical attainments and fitness of actuaries were not overlooked or obscured. The Council of the Institute desired to co-operate in every possible manner with the Society, and, as far as might be feasible, to make available to the Society the tutorial and examination experience and facilities of the Institute. To these ends, representatives of the Institute and of the Faculty of Actuaries entered into friendly discussion with representatives of the Society. It was not found practicable to carry the matter far in the directions indicated, but, as regards statistical posts in Government Service, the Council was able to make the following announcement in its Report presented at the Annual General Meeting of June 1946:

In view of developments with regard to the employment of Statisticians in Government Service, the Councils of the Institute and Faculty have made joint representations to the Treasury in order that any doubt may be removed as to the recognition of the fitness of actuaries for appointment in this capacity. The Council is pleased to be able to report that an assurance has been received to the effect that it will be made quite clear in any statements by the Treasury, to Departments or more publicly, that qualified actuaries are regarded as fitted for statistical work at all levels.

In the same Report, there was the pleasing statement that the Council of the Society had expressed its desire to elect to Honorary

Fellowship the President of the Institute for the time being—a gracious overture that had been accepted with cordial appreciation.

Towards the end of 1926, the Council supported the representations made to the Government by the Association of Superannuation Funds for relief from the operation upon Pension and other Funds of the Rule of Law against Perpetuities. The efforts were brought to fruition in the passing of the Superannuation and other Trust Funds (Validation) Act of 1927. In 1927, the Council discussed with the Inland Revenue Authorities the proper interpretation of the understanding reached in 1900 with regard to the valuation of Reversions for Probate. It was agreed that due allowance should be made for the costs that would be properly attendant upon an actual purchase. The general subject of the valuation of Reversions and Life Interests came up later in connexion with various books issued under outside auspices and containing statements that were regarded by the Council as being inappropriate or misleading. Assistance and advice were given in the task of putting this matter in order.

Contacts with the Faculty of Actuaries, already and for long general and friendly when the period began, developed most markedly. In 1929, the President of the Institute was advised informally by the President of the Faculty that a Committee for Investment Research had been appointed in Scotland. The Council of the Institute welcomed the suggestion of co-operation and, after joint talks, the new undertaking was launched. It took the form of publishing, at weekly intervals, price and yield indexes for Ordinary Stocks arranged in groups and, at monthly intervals, similar information for some other types of securities. Subscribers were to be enrolled on terms such that the venture would be self-supporting. Much work had to be done in laying down the basis and defining the scope and general operation of the new Index. The regular computation of the actual figures was an extremely heavy task, made possible only by the help of various members of the two Bodies. So onerous, indeed, was the labour that steps had to be taken after a short interval to review 'the whole matter', as the contemporary Council Minute puts it. From time to time, changes in policy, in content and in working have been introduced to give effect to the growing experience and to meet the storms of war and of economic crisis. But the Actuaries' Investment Index has continued and even

has shown a somewhat embarrassing tendency to produce an unwanted surplus of income over expenditure.

In 1929, the question was explored (as, indeed, it had been many years earlier) of having common examinations for the two Bodies, at least in the earlier parts. The conclusion was reached that such unification was not then practicable, but the failure, if it were failure, was mitigated in 1936 when, as is told later, the Faculty and the Institute entered into full partnership in the establishment, conduct and development of the Actuarial Tuition Service. Such a partnership was recognized at once by both Bodies as being essential for efficiency.

The Institute was concerned also with many Actuarial Societies overseas. Good wishes on inauguration in India, Brazil, Italy, Mexico and Palestine—readiness to offer them in the case of a proposed Rumanian Body (but was it ever born?)—congratulations on, and representation at, celebrations of important anniversaries, in Belgium, Norway and North America—all these gave opportunities of expressing goodwill and forging links of professional contact, enriched in many cases by the inception and the growth of personal friendships. In 1929, it was resolved:

That the Council of the Institute of Actuaries desire to offer their sincere congratulations to the Norwegian Actuarial Society on the occasion of the celebrations on the 25th Oct. 1929, to mark the 25th Anniversary of the birth of the Society. The Council express the hope that the Society will have a long and prosperous future, and that the cordial relations which have hitherto existed between the Society and the Institute will continue.

W. P. Elderton visited Scandinavia in 1931 and, as a result, a scheme was formulated whereby young Scandinavian students of ability and distinction were to be invited to come to England, to join the Institute's classes for a period of 3 or 4 months and to attend meetings of the Institute and of the Students' Society. Denmark, Finland, Norway and Sweden were included in the plan, which came to fruition in 1932, when Mr Gunnar Trier, of Norway, arrived. By his personal and representative qualities he made the scheme an instant and a continuing success, that was interrupted only, and only interrupted, by the outbreak of the War of 1939-45. Year by year, the students came, saw and won their victory of understanding and friendship.

Jubilee of the Actuarial Society of America

Soon after the end of hostilities, the visits were renewed and suggestions were made, which it is hoped to bring to pass in ampler days, of similar arrangements for Dutch and other students.

In the summer of 1939, the President of the Danish Actuarial Society invited the Council of the Institute to send an English Actuary to lecture before the sister Societies in Denmark, Finland, Norway and Sweden. The suggestion was accepted cordially, but the war prevented its being carried into effect; only for a time, however, because the President of the Institute went in person to all these four countries during the spring of 1947.

At a joint meeting of the Actuarial Society of America and the American Institute of Actuaries in 1938, several members of the Institute and of the Faculty of Actuaries attended by invitation. This unique gathering was followed, in 1939, by the Jubilee Celebration of the Actuarial Society of America: the Institute was represented by its President, who had the pleasure of conveying a gift in the form of a complete set of the *Journal*. Describing the scene, the President said at the Annual General Meeting of the Institute in June 1939:

As evidence of the message which he carried from this country, the Institute presented to the Actuarial Society of America a complete set of the *Journal*, made possible in large measure by the generous action of one of the companies on this side. Those volumes, seventy-four in all, were re-bound in Niger morocco, a beautiful exhibition of craftsmanship by the Cambridge University Press. He had been able to arrange, not without much effort and difficulty, for the set to stand hidden by the platform, and as he made the presentation, throwing off the covering, the whole assembly rose as one man in acknowledgement of the gift. Each volume bore on its face the seal of the Institute, and had within a book-plate reading 'Presented to the Actuarial Society of America by the Institute of Actuaries, Staple Inn, MDCCCCXXXIX'. In the border of the book-plate were engraved the wild rose and the acorn, as symbols of this country; at the top was the hour-glass and in the lower border the cornucopia.

He added that the Institute intended to add the successive volumes of the *Journal* and of the *Year Book* as they were published. The special book-plate is reproduced in the *Year Book* for 1939-40 (p. 162).

In 1946, there was an interchange of visits between the Dutch and the English Institutes of Actuaries. The President, the Treasurer and

the Secretary of the Dutch Institute came to England and two past-Presidents of the English Institute went to Holland, with great pleasure to hosts and guests.

In 1923, the Council arranged to help the University of Tokio in replacing its library after a devastating earthquake.

The centenary of the death of Dr John Heysham was commemorated in the City of Carlisle in March 1934. The President attended a meeting there in honour of the man who had collected the statistics on which Milne based the Carlisle Table. The Institute made a grant of 25 guineas to the Memorial Fund, raised for the Dispensary that Dr Heysham had founded in the city.

The disquiet, evident in Great Britain during recent years about population trends, led in 1938 to the setting-up of the Population Investigation Committee. The Institute was invited to appoint an official representative, but the Council resolved not to do so. The Minute added 'but that decision would of course not preclude the Committee from obtaining any actuarial advice they may desire'. No reason can be suggested for the refusal which, having regard to later events, must be described as inexplicable. When, in 1944, the Royal Commission on Population Trends was set up and it was found that the actuarial profession was not to be represented thereon, the Council was much concerned. Strong protest was made, without success as regards the membership of the Commission itself. It was arranged, however, that the Statistical Committee advising the Commission should contain several actuaries, one of whom was nominated by the Council of the Institute. The Committee accepted the offer of the Council to provide help in its investigation of specific problems.

In 1945, representations were made successfully to the Board of Trade for the amendment of a provision in the Assurance Companies Bill that was felt to involve a risk of fettering an actuary's discretion in the choice of a basis of valuation for long-term Assurance business.

To ensure as far as possible that matters of general professional concern shall not lack timeous consideration, through being overlooked or learned too late, the Council has organized a scrutiny, by volunteers, of important organs of the Press.

Prizes

MISCELLANEOUS MATTERS

Loyal addresses were offered to the Crown on the conclusion of the Wars of 1914-19 and 1939-45, on the death of Her Majesty Queen Alexandra and of His Majesty King George V and on the accession of His Majesty King Edward VIII and of His Majesty King George VI. In 1935, the Institute gave 100 guineas to the King George V Jubilee Trust and, a year later, a similar sum to the King George V National Memorial Fund.

At the Coronation of Their Majesties King George VI and Queen Elizabeth, the Institute received the honour of an invitation to send a representative to the Service in Westminster Abbey: by unanimous wish of the Council, the President attended. Also, H.M. Office of Works made available, at a charge of 15s. each, four seats in Hyde Park for the viewing of the Coronation Procession: they were offered by the Council to the Students' Society.

The subject of Institute Prizes engaged attention from several aspects. In 1922, it was agreed that prizes might be awarded for Sessional Papers or other work of exceptional merit. Research grants also were to be given from the Prize Funds to facilitate original investigation. It was decided, later, that an annual prize could be allowed for a paper read before the Students' Society. Steps were taken, also, to put the Prize Funds themselves on a satisfactory footing and they were separated from the General Fund in the Accounts of the Institute. In 1934, Dr Schaertlin gave £30 'to commemorate his long association with the Institute as a Corresponding Member for Switzerland'. The money was devoted to an essay competition, open to members of the Institute and of the Faculty of Actuaries, on the subject of Actuarial Notation. Then, in 1938, Mr E. E. Rhodes, an Honorary Fellow of the Institute and a past-President of the Actuarial Society of America, offered 'a Prize amounting to 50 guineas for an essay on some actuarial subject of a practical nature, the competition to be restricted to Fellows of the Institute, who had qualified during the past 10 years'. Five essays were received, but the Council was informed in September 1939 that the adjudicators were unable to regard any as having merit sufficient to justify the award of a prize. In the circumstances, the project had to be left in abeyance. When, in 1944, the distinguished donor offered to withdraw his original

conditions and to allow the money to be added to one of the existing Prize Funds, the Council requested him to permit the matter to remain open so that the competition might be renewed after the end of the war. He agreed, and, at the Annual General Meeting in June 1947, the President had the pleasure of announcing that the prize had been won.

A succinct account appears in the *Year Book* of the Institute regarding the various Prize Funds and specific prizes, with a complete list of the winners.

The protection of the privilege of the Institute, in relation to the use of the distinctive letters, F.I.A. and A.I.A., called for action only on a few occasions. There was one instance of the use of the term 'Member' in a sense deemed to be objectionable.

Older members of the Institute and other senior actuaries outside its ranks, who learned to count 'King's Formula 39 (a)' as an important weapon in their possibly meagre armoury, will understand George King's protest that A. Henry, in his text-book, *Calculus and Probability*, should have attributed the formula to G. F. Hardy. The matter was adjusted by a characteristically direct and graceful letter from Henry in January 1924 (*J.I.A.* LV, 105).

In 1925, a subject known as 'The Scope of the Profession' came into prominence. It had been mentioned previously of course, in particular by G. Marks in his Presidential Address of December 1918. After more than 20 years, it may be mentioned, perhaps without impiety, in this subsection of the chapter. F. A. A. Menzler offered a paper for discussion under the title 'On the future of the Actuarial Profession, together with some remarks on possibilities of extending its scope'. The title was thought by some to be as challengingly explosive as were the contents. Lest one such paper should corrupt the rest, and possibly to remind the author of other purposes for which like gatherings might be summoned, it was arranged that a Special General Meeting should be held. And nothing untoward happened: on the contrary, it became clear that there were a general feeling of unease and a belief that the situation needed to be examined. The Council appointed a strong Committee, which invited or received evidence from many representative members and made its report in February 1926. The unusual course was taken of publishing the Report in the *Journal* (LVII, 122), no comment by the Council

The Scope of the Profession

being added. After suggesting that the Council was not concerned to take steps to limit numbers by making the examinations more stringent, the Committee expressed the view that alteration of the Syllabus was undesirable for the time being. But the Committee thought that, when changes came to be considered, the suggestion made to it of establishing a new qualification, A.I.A. (Statistics), should be weighed carefully. After mentioning with favour post-graduate lectures and individual research, the Report passed to the discussion of avenues of expansion of employment. The specific recommendations to the Council were:

1. To appoint a permanent Committee (i.e. a Committee in continuous existence like its Finance Committee) charged with the following duties:

- (a) To keep in touch with movements and developments of other Bodies, such as the Statistical Society, Chartered Insurance Institute, Institute of Chartered Accountants, etc., etc.
- (b) To watch legislation and political activities generally with a view to securing early action on behalf of the profession when such appears to be desirable.
- (c) The supply of suitable papers for Sessional Meetings and the arrangements in connexion therewith. Papers by non-members, the attendance of visitors, reporting Proceedings etc., etc. The revision from time to time of the list of subjects suitable for research and sessional papers.

2. To set up an 'Appointments Board', following with suitable modifications the lines of the Appointments Board of Cambridge University.

3. To circulate a list of members more widely than is the present practice.

4. To publish names of successful examination candidates in the public press.

5. To advertise Institute publications in suitable Professional and Trade Journals, and to secure inclusion in the Public Schools Year Book of an adequate description of the Actuarial Profession.

6. To send a circular to the Actuaries of Composite Companies regarding the suggested temporary transfer of Junior Actuaries to non-Life Departments.

7. To have an Annual Dinner.

The Report ended with the warning that one of the earliest effects of extension of scope might be an increase in membership drawn from the industry or occupation into which the Institute had penetrated.

Of these, the most obviously immediate were No. 1, 2 and 7: all of them were put into operation and have continued with modifications suggested by experience.

The heady wine of the Council's new enthusiasm o'erspilled its glass in one case. It was decided 'that a paper be read by a leading member of the Institute at a sessional meeting' of a Society of Chartered Accountants. Some months later, the Council had to be informed that the Society in prospect 'had not a meeting available at which the proposed paper by an Actuary could be read'.

The first Dinner was held on 21 October 1926 within easy reach of the Nelson Column. Mr Winston Churchill, Chancellor of the Exchequer, was the principal guest.

It was found to be advisable to lengthen to 2 years the intervals between the Dinners and the happy feature was introduced of holding the function in the spring, just after the Council had elected the new President, but before any announcement had been made. Thus, apart from unofficial news, the members and the guests had the pleasure of hearing at the Dinner the first proper intimation of the new President's name and of acclaiming him as the prospective Head of the Institute. The Dinners were resumed in 1946 after the long interruption of the war: the President of the Faculty of Actuaries gave to the Institute at the Dinner an original bust of Napier, the inventor of logarithms, presented by the Faculty to replace the copy lost in the destruction of Staple Inn.

The Appointments Board at first took the form mainly of a Register under the charge of the Students' Society. Later, it became a full Board and so continues, with great activity, encouraging result (obtained by unremitting work on the part of the administrator) and occasional criticism by the employers of some of those who leave their present jobs for others.

A most useful development allied with the idea of extension of scope was the issue of the Institute *Year Book*. Beginning in 1928, and from the first under the editorship of F. A. A. Menzler, this comprehensive record has given to the profession, in compact form, full information of the Institute's purpose, activity and membership. A set of *Year Books* is invaluable to anyone who wishes to trace the general history of the Institute, to read its Examination Syllabus and Papers, to see its Accounts and to learn of its Proceedings at

‘I Hold Every Man a Debtor’

Meetings and Official Dinners. Moreover, the *Year Book* is an indispensable introduction to the profession for prospective entrants. If nothing else had come from the early ‘Scope’ discussions—but much else has come—the *Year Book* would be an ample result.

While the Institute was seeking to elucidate the scope of the profession, certain outsiders were finding scope in it. Two students had their overcoats stolen in 1926 and the Council awarded £4 to each of them. In 1933, four more overcoats were taken, but the Council decided upon no action. A year later, one disappeared and the loser received £5. 15s. 6d. (*ex gratia*).

In 1931, a Fellow of the Institute desired to incorporate in his book-plate ‘the three figures which appear in the Institute Seal’. It was decided ‘that the use of the symbolic details of the Seal for any but official purposes is deprecated by the Council’.

A somewhat similar, though a more remote, request was refused some years later, when a non-member asked for permission to use the crest of the Institute in the cover-design of a book on Insurance.

The Baconian motto that the Institute sets on the title-page of its *Journal* was the subject of a letter from A. E. King (*J.I.A.* lxxi, 185). He found that the motto appeared for the first time in 1869 and that it was taken from the Preface to Bacon’s *The Elements of the Common Laws of England*. The full quotation as given by A. E. King runs thus:

I hold every man a debtor to his profession, from the which as men of course do seeke to receive countenance and profit, so ought they of duty to endeavour themselves by way of amends, to be a helpe and ornament thereunto; this is performed in some degree by the honest and liberall practice of a profession, when men shall carry a respect not to descend into any course that is corrupt and unworthy thereof, and preserve themselves free from the abuses wherewith the same profession is noted to bee infected; but much more is this performed if a man bee able to visite and strengthen the roots and foundation of the science it selfe; thereby not onely gracing it in reputation and dignity, but also amplifying it in perfection and substance....

In a final paragraph, King said:

Such is the passage containing our Motto. Part of my quest was to discover the context of the motto and in my view the additional words which appear above have a message of their own which is not without

value. It is not given to many to fill the high offices of a profession or to have the ability to become ornaments of outstanding merit, nevertheless those of ordinary intelligence can sustain the honour and common weal by honest endeavour and rectitude of conduct. Of course in Bacon's day the legal, medical and other professions had a fair number of knaves and charlatans, and the additional words mentioned therefore had a more particular significance years ago. But even to-day it is necessary to say a few words on professional conduct!

There is poignant, personal interest in this communication, sent from a sanatorium less than 2 years before his death by him who, in youth, was one of the brightest ornaments of the newly founded Institute of Actuaries Students' Society. Translated to Edinburgh, he gave to the Faculty of Actuaries unstinted and brilliant service, despite the heavy handicap of physical weakness. Yet he never forgot his Alma Mater and, even while in the grip of the disease that caused his death, he turned to a last quest for the origin of the motto of which his life and work had been so signal an illustration.

During the period there were various exchanges of publications with other Bodies, and gifts by the Institute of its own material.

In 1942, the Council agreed to D. C. Fraser's request to be allowed 'to use, in a contribution which the Royal Society proposed to issue in connexion with Newton's Tercentenary, material which was published by the Institute in 1927'.

International Congresses (of Actuaries) were not resumed, after the War of 1914-19, until 1927, when a very successful gathering took place in London. The Institute received an unexpected windfall in 1930 in the shape of a cheque for £204. 15s. 'in respect of 90 sets each of five volumes of the *Transactions*', destroyed by a fire in the warehouse of the publishers. Other Congresses followed in Stockholm, Rome and Paris. The meetings in Rome were marked by a strong British initiative on the subject of Actuarial Notation. The subject had been raised 2 years before in a letter from Dr S. Dumas, a Corresponding Member for Switzerland, who was interested in the extension of the system to Invalidity Insurance. The General Purposes Committee of the Council of the Institute proposed the consideration by a special Committee of 'the whole subject of actuarial notation, starting from the Universal Notation and investi-

gating the best method of giving effect to the need that has arisen since 1898 for new symbols'. The Council agreed, co-operation with the Faculty of Actuaries was obtained and an international battle began (on a small scale) behind the scenes. The British contingent operated under the command of W. P. Elderton, who induced various English and Scottish members to go into action by delivering a series of short speeches on the various aspects of the problem. Despite these efforts, and the appointment of an International Committee by the Paris Congress of 1937, the issue remained unsettled. After further work, interrupted by the War of 1939-45, the question became urgent in Great Britain because of the impending preparation of a series of new text-books. As there was no prospect of the early holding of an International Congress, the Institute and the Faculty of Actuaries, with the approval of the American Bodies, 'decided to adopt at a date to be mutually arranged those recommendations which had received unanimous or substantial support at the meetings of the Committee'. A pamphlet giving details of the system was prepared in July 1946 by the Institute and the Faculty of Actuaries accordingly.

THE WAR OF 1939-45

The immediate impact of war was similar to that felt in 1914, but there was intensified menace from the air. The Hall was not blacked-out and evening travel was difficult: in consequence, the Council met in mid-afternoon and Sessional gatherings were held only rarely, and then at an hour considerably earlier than before.

War risk insurance, the removal of the staff of the Institute to safer working-quarters provided by the courtesy of the Prudential Assurance Company and Fire-watching—all these measures underlined the horrible threat from bombing. One copy of each publication of the Institute was ordered to be held in at least two different buildings and the Minute Books of the Institute, going back to 1848 and stored with its Bankers, were micro-photographed through facilities provided by the Commercial Union Assurance Company.

The Institute entered into an arrangement with other professional Bodies whereby they were divided into small groups, each member of which undertook to provide accommodation for any that might lose its premises through enemy action. This lien was the ground

on which the Council declined a request from the Benchers of Gray's Inn to be allowed to hold daily luncheons in Staple Inn Hall.

The Council was much concerned also with questions of the release of actuaries for National Service and their being employed to full advantage after being called up. At one point, special steps were taken to determine whether, in fact, this latter consideration was being borne in mind sufficiently by the authorities. On another occasion, the Council intervened with the object of securing that the professional qualifications of members engaged in a technical branch of Government service were rated consistently with the attainments of the non-members doing similar work.

The Institute was represented on the Actuaries and Statisticians Committee of the Central Register Advisory Council.

An investigation was set on foot under the aegis of the Mortality Committee for the purpose of measuring losses occasioned to the Offices from war deaths.

Finance became a serious preoccupation. Income fell, partly from the waiving of subscriptions in certain cases and also because of the much reduced influx of new members; the Students' Society was relieved of contributions that otherwise it would have made towards the upkeep of the premises; but the heaviest drain occurred in connexion with the Actuarial Tuition Service. The Service had been established only for 3 years when the war broke out. The financial arrangements had been planned by the Institute and the Faculty of Actuaries, as joint-sponsors, so that, while discharging the cost of establishment and paying a reasonable yearly sum to the Institute and the Faculty of Actuaries for premises used and clerical assistance provided, the Service should give the best possible tuition and make no profit. The sponsors had agreed also that Examination receipts, less expenses, should be placed to the credit of the Tuition Service; and the short experience before the war had indicated quite definitely that the Service would soon repay the initial costs and yield a substantial surplus, to be devoted either to further facilities or to reduction of tuition fees. The war upset the careful scheme completely and it was not long before the Institute and the Faculty had not only to forgo the annual contributions but also to make heavy subsidies to keep the Service in being. The building-up of the financial reserves of the Institute, to restore these depletions, to meet greatly

The Kindness of Actuaries in North America

enlarged outgo for educational work and for other essential purposes, has been begun in the most practical way by a substantial increase of members' subscriptions.

A touching and characteristic gesture was made in 1940 by the actuaries of North America, when they offered to accommodate the children of any members who wished to send their families to America during the emergency. Although, in the end, no parents decided to be parted from their children, the suggestion was received with very deep gratitude. On the entry of the United States of America into the war, the Council sent the following message to the Actuarial Society of America, and a similar one to the American Institute of Actuaries:

On this first occasion upon which the Council of the Institute of Actuaries has met since the entry of the United States into the War it desires to convey to the President, Council and Members of the Actuarial Society of America its sympathy with the United States in the treacherous attack made on her, its confidence in the outcome of this grim struggle and its satisfaction that the United States and the British Empire are again closely associated in a great and righteous cause.

Further, in the autumn of 1942, with the cordial approval of the Faculty of Actuaries, a cable was sent to each of the two American sister Bodies in these terms:

We have the liveliest recollection of and gratitude for the generous offer of hospitality extended to children of British actuaries in early days of the war. May we now reciprocate by inviting you to put into touch with us any of your young people now serving in this country when we shall be delighted to assist them in any way we can and to extend to them a hearty welcome. Suggest your young men over here get into touch with Institute or Faculty headquarters.

The last generous word in this correspondence lay with America. At a joint meeting on 8 November 1945 of the Actuarial Society of America and the American Institute of Actuaries, a resolution was passed of fraternal greeting and congratulation to the Institute and to the Faculty of Actuaries. Beautifully illuminated copies of the Resolution were sent to the two British Bodies, by which they are treasured, much for themselves and more for what they mean. The engrossment hangs in the Committee Room in Staple Inn Buildings

until it can be afforded a place of honour in the Institute's new home. A facsimile reproduction appeared in *J.I.A.* LXXII, 305.

During the long lull in bombing, between the defeat of the enemy aeroplanes and the inception of the attack by pilotless missiles, it was found practicable to provide the Hall with black-out equipment. This measure enabled the Institute to hold meetings more readily and three were held in 1943 for the private discussion of Sir William Beveridge's *Report on Social Security*.

Still closer relations were established with the Faculty of Actuaries by the appointment, in 1944, from each Body, of a Liaison Committee. Joint meetings are held from time to time for the discussion of important questions of common interest.

As opportunity arose, greetings were sent by the Institute to the undaunted veteran of International Congresses, M. Bégault of Belgium, to Corresponding Members and to sister Bodies in liberated countries. The Institute was asked and was able to take a small share in restoring, for the second time, the Library of the University of Louvain.

The record is ended but for two matters, reserved of set purpose as the last—the Roll of Members who died on service or by enemy action, and the loss of Staple Inn Hall.

There is, and can be yet, no tangible memorial of those who are gone. They are not forgotten: the President announced at the Annual General Meeting in 1947 that in due course there would be a memorial to them, though, at present, its form must remain undetermined. As far as it is known, the tale of losses (forty-two) is given opposite.

And finally, of Staple Inn as it was, and is remembered by so many—the Hall and much else were destroyed by a flying-bomb that fell on the garden near the goldfish pool at about 7.30 in the evening of Thursday, 24 August 1944. By order of the Council, some account of the event was published in *J.I.A.* LXXII, 151, and photographs of the scene were reproduced. There was also a facsimile of the gracious message of sympathy sent by the Faculty of Actuaries, one of many received from friends near and far.

The immediate emergency was surmounted by the transfer of the Office to accommodation provided, with instant helpfulness, by the Prudential Assurance Company. As soon as some rooms, leased from

Those Lost by the War of 1939-45

the Company in Staple Inn Buildings, were ready, the Office was placed there. The Council began to meet in the Council Chamber of the Law Society, which, in giving this kindly aid, was acting in pursuance of the reciprocal arrangement already mentioned. Later, the Council Meetings were transferred to the Council Chamber of

JOHN A. S. BANTING	JOHN C. R. MCCALLUM
CHRISTOPHER E. T. BARTRAM	JOHN R. MARTIN
ERIC A. BERGAN	JOHN H. MEYER
WILLIAM G. BONE	CHARLES L. MOODY
NOEL C. BRAY	FRANCIS W. MORRELL
STANTON H. BUSH	ARNOLD G. NOBLE
MAURICE R. CLARK	JAMES PARKES
HOWARD B. CURRALL	ERIC E. C. PHILLIPS
HAROLD P. DOWSETT	KENNETH E. PLATT
KENNETH N. DRUMMOND	BARON E. PLATTS
STANLEY J. ELPHICK	JOHN POYER-WILLIAMS
PAUL GILDER	FRANK W. PRICE
WILLIAM E. GILLET	GERALD D. REDFERN
RALPH B. GOUGH	ERNEST G. REDMAN
ARNOLD B. HALL	STUART K. SCOTT
JOHN D. HARGREAVES	ATHOL C. K. SMITH
GORDON F. JONES	NEALE M. THEWLIS
LEONARD T. KIFF	ARTHUR F. WAINWRIGHT
ANTHONY F. N. LADEFOGED	GEORGE B. WATTERS
BRUCE H. LAXTON	DAVID M. WATTS
DAVID R. LEE	PETER R. WRIGHT

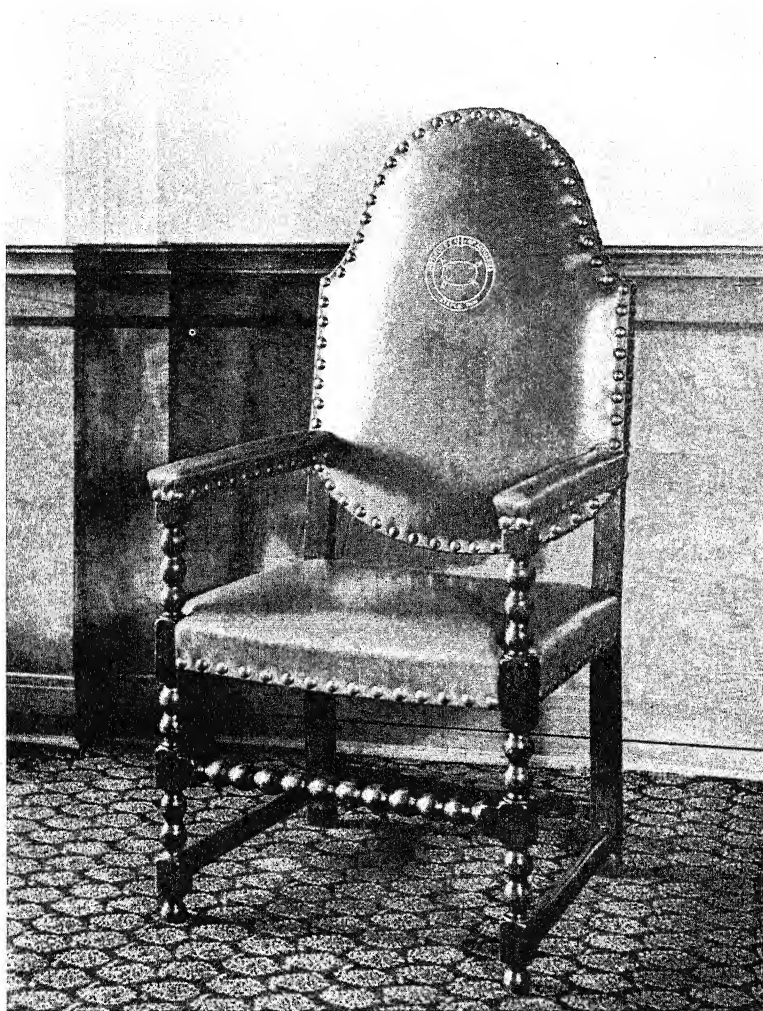
the Chartered Insurance Institute. Until a room became available in Staple Inn Buildings, Committee Meetings took place, by courtesy of the Royal Statistical Society, in its premises. The Society also gave facilities for the use of its Library by members of the Institute. Sessional Meetings were held in the Conference Hall of the Prudential Assurance Company and also in the Hall of the Chartered Insurance Institute. Finally, in this list of evidences of practical sympathy, mention must be made of the Chartered Institute of Patent Agents, which granted the use of its Hall in Staple Inn Buildings to the Institute of Actuaries Students' Society.

The actual link with Staple Inn itself was preserved, not only by the continued occupancy of the virtually undamaged rooms in the

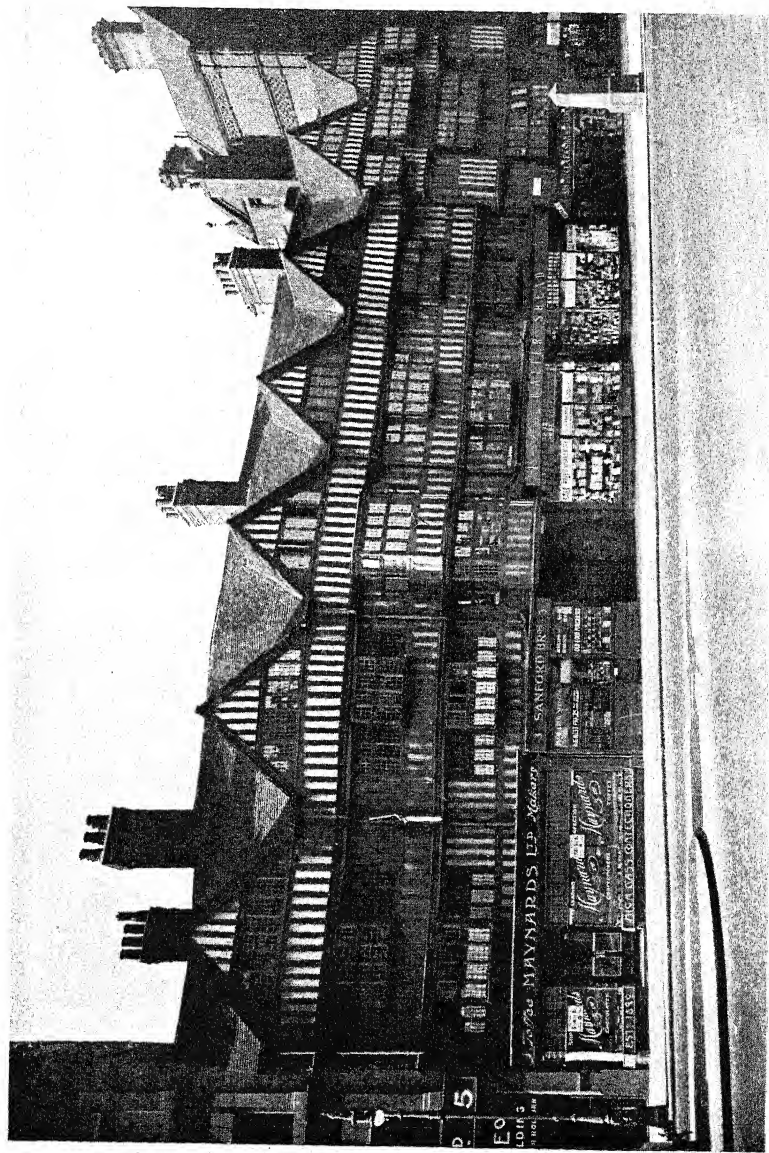
Holborn frontage, but also by taking another room in No. 2 on the west side. Some months later, the small 'New Hall' was repaired sufficiently to be used for some meetings.

When, after a long interval, the wreckage of Staple Inn Hall was cleared, it was found that the 'Phelps' Council table and almost all the chairs were smashed beyond renewing—two chairs only could be saved. Meanwhile, G. J. Lidstone had expressed his desire to replace the table and the chairs should they have been destroyed. As soon as their fate was determined, he implemented his contingent promise and inspired the effort that was made to obtain the new equipment. Happily it was possible to secure the service of the maker of the original gift, who could provide not substitutes but replicas. Thus, the 'Lidstone' table and chairs will express, in full measure, the donor's affection for the Institute and his devotion to the memory of a dear friend. In fulfilment of the donor's desire, the President's chair was finished in time for, and was used at, the Annual General Meeting of 1946. A photograph (reproduced here) appears in *J.I.A.* LXXII at p. 446, where some account is offered of the wonderful gift as a whole, and the inscription is quoted that will appear on the table itself. The President announced at the meeting the Council's resolve that, in association with the new home of the Institute, there should be—its form yet undetermined but its purpose clear—a feature commemorative of the great work and influence of G. J. Lidstone. The making of the new table and of the other chairs was well advanced by the autumn of 1947: it is not possible yet to say where they will find their rightful place, but there is hope that, years hence, the Institute will be re-established in Staple Inn itself. The new home will be enriched by members and friends in divers ways: W. P. Elderton made such a gift in October 1944, sister Bodies have intimated their desire to do so when the time shall have come and, doubtless, there will be many other individual tokens.

On this chord of loss and sympathy and hope, the general story of the Institute, in its first 100 years, shall end: an honourable past, an anxious and developing present, an unknown future—but surely, when all shall have been accomplished and the record closed, a single undivided whole.



THE 'PHELPS-LIDSTONE' GIFT THE PRESIDENT'S CHAIR



STAPLE INN THE FRONTAGE TO HOLBORN

PART II

CHAPTER VII

THE EDUCATIONAL WORK OF THE INSTITUTE, 1848-1948*

The objects set forth in Clause 2 of the Scheme adopted at the inauguration of the Institute on 8 July 1848, do not contain any direct reference to the educational work now to be reviewed. It was, of course, both implicit and explicit in the Scheme as a whole: the 12th and 13th Clauses provided for the appointment of three Examiners and gave a rough sketch of the subjects to be covered.

Unless the remaining records have been misunderstood, it is true to say that the need for this educational work was one of the chief considerations that led many to support the plan for an Institute. The number of Life Assurance Offices in existence or projected was large—some were respectable and firmly founded; others were well intentioned, but needing to be directed along the right path; in the remainder, were ill advised and even deliberately fraudulent examples. There were among the actuaries of those days men of wide culture and high professional attainment, acquired by personal study and contact. Some of these men—but not all of them—stood aloof from

* The meaning of 'educational work' is limited in this chapter to the training and examination of students for their professional qualification of Fellowship, or Associateship and to specific 'post-graduate' instruction in such forms as Lectures. Within this limit no due account is taken of that intangible but essential process by which a man is influenced by, and himself influences, his fellows in their common membership of an entity that is more than the sum of its constituents: the tradition that helps to keep an informed person, in John Ruskin's words, from turning his arithmetic to lying and his literature to lust.

The Institute of Actuaries Students' Society receives brief mention at the end of this chapter because of its primary function of educating younger members, whether 'qualified' or not. But it is true also of the Society that its work is wider and goes deeper than the doing of 'educational work' in the restricted sense used in the present chapter. Similar statements are true of the Birmingham Actuarial Society and the Manchester Actuarial Society.

the Institute and, as has been recorded earlier in this book, they formed the proud, unbending Actuaries' Club—a company of the elect, advisers of first-class Offices, content to find and to train their own successors. They exhibited, in their personal worth and in the repute of the Offices to which they were attached, the virtues and the defects of a limited aristocratic tradition. For what they were and what they represented, they should be accounted worthy, but they did not appreciate the need felt in their time. By rigid separateness they ensured their own extinction, though, happily, much was preserved for which they stood so stoutly. Also, they made harder, though perhaps more stimulating, the task of others, equally notable, who decided as it were to go out into the highways and byways and to encourage others to come in—on gradually improving conditions.

The story begins with the appointment, in April 1849, of four Examiners (Messrs Davies, Sylvester, Hardy and Liveing) 'to prepare a Syllabus for the approval of the Council'. By July, 'the draft of a plan of examination of Candidates for Certificates of Competency, prepared by the Examiners' was approved thus:

1. There shall be two Examinations in the course of each year which shall be conducted by at least three of the Examiners of the Institute.

2. The first Examination shall take place during the first week in the month of May, and the second Examination shall take place during the first week in the month of December.

3. The Examiners shall give the Members of the Institute at least fourteen days' notice of the day and hour on which the Examination will take place.

4. Any Candidate for Examination must give seven days' notice of his intention to apply for Examination.

5. The Examination may be conducted in writing or viva voce, at the discretion of the Examiners.

6. If the Examination be conducted in writing, every candidate shall at the time of the Examination be furnished with written or printed papers containing questions which he shall be required to answer within a limited time, without having in the interim access to Books or other means of information—Books of Tables or such other Books as the Examiners may allow excepted.

7. A majority of the Examiners shall decide on the eligibility of a Candidate, but should their opinions be equally divided, the question shall be remitted to the President and Council to take such steps as they may deem proper for arriving at a decision.

The Beginning of Examinations

8. The Mathematical Examination shall be in Arithmetic and Algebra, the elementary doctrines of Probability, Simple and Compound Interest, and in the theories of Life Assurance and Annuities.

9. The Examination in Vital Statistics shall be chiefly elementary and relating to the construction and arrangement of Tables of Mortality.

10. The Examination in Book-keeping shall include such general questions on Official routine and detail as may from time to time appear necessary to the Examiners.

11. A Form of Diploma to be granted to successful Candidates shall be prepared for the approval of the Council.

Thus, two Examinations were prescribed for each year and provision was made for viva voce tests (which were used, see *J.I.A.* 1, 135, No. 2).

In October 1849, Mr Liveing, on account of his numerous engagements, resigned appointment as Examiner:

Ordered that Mr Liveing be informed that the Council have no hesitation in acceding to his request, at the same time they much regret the loss of his services.

The Examiners prepared a form of Diploma which, in December 1849, was ordered to be printed 'and a copy sent to each member of the Council' (presumably as a specimen). In the following April, notice was to be given to the Associates that the Examination for a Certificate of Competency would be held in the first week in May, but the month was altered, shortly afterwards, to June. Two papers were set, to be taken on 10 and 11 June, with a total of 35 written questions. The results were given at the last Meeting of the Session, on 24 June 1850, when 'the President announced that 6 candidates who had presented themselves for examination were declared to be entitled to Certificates of Competency'. The statement is indefinite with regard to the total number of examinees, but an article headed 'Examination Papers' (*J.I.A.* 1, 110, No. 1) makes a positive assertion that there were only six. The actual papers followed the article, which itself is reproduced for the sake of its general interest:

Whilst the character and standing of the Actuarial profession are better defined and brought out by the limits which the constitution and laws of the Institute have appointed for it, and whilst it is thus likely to be in future guarded in a great measure from admixture with all 'baser matter', it

must be evident that the profession will depend for its consideration in time to come not only on the exclusion of ignorance and incompetency, but on the reputation which its members shall acquire for the possession of that knowledge and of those qualities which are calculated to throw a lustre and dignity around it. That the exertions of the present members of the Institute will not be wanting to forward this most devoutly to be wished consummation, there is every reason to believe; certain it is, that of the various means of accomplishing it which present themselves, there is none more important or better adapted to the purpose, than the annual examination, which they have instituted, upon which to found the grant of certificates of competency. It is scarcely too much to say, that upon this test will mainly depend the future position and character of the profession; since the more searching and comprehensive the one shall become, the more powerful and efficient will be the other. Influenced by these considerations, we looked with a good deal of interest for the result of the first attempt of the kind ever made in this particular arena, and when we lay before our readers (which by the permission of the Institute we are enabled to do) the papers submitted to the candidates on this occasion, we feel that they will be ready to join in our expression of great satisfaction; not only that six Associates of the Institute voluntarily presented themselves for examination, but that all the six passed through it with great ability and credit to themselves. For it must be remembered that there was little time for preparation and little knowledge of what to prepare for; and under such circumstances the capability of passing through the one ordeal implied the power to grapple with another, of a more widely extended, if not of a severer character. Such being the result of a first experiment, it is apparent that without any injudicious acceleration, we may look in the course of a few years for certificates of competency, granted after examinations which will vie in depth and extent with those of our leading universities, and which shall comprehend not only the knowledge of the mathematician and the statist, but an acquaintance with the principles and action of our own social and political economy, and a familiarity at least with the means of comparing them with those of other nations both ancient and modern.

Solutions of the Examination questions were prepared by H. W. Porter, himself a candidate, and some were published in the *Journal*.

In 1851, it was provided that the Examinations should 'consist of three parts, separated from each other by an interval of at least one year', no member to be eligible for the final examination unless of the full age of 21 and having been 'at least 5 years in the service of

The Plan for the First Year's Examination

a Life Assurance Company'. The Examiners were requested to draw up a code of Bye-Laws for regulating the conduct of the Examinations.

The new code was ready by the end of 1851 and contained a number of provisions on the lines of those in the original scheme, but the Examinations were to be held only once a year, in December. For the time being, only the First Year's Examination was covered: in the plan reproduced below, the division of the subjects into sections is foreshadowed:

Plan of the First Year's Examination

Arithmetic 10 questions, viz.

Vulgar Fractions	2	Questions
Decimal Fractions	3	"
Use of Logarithms	4	"
Extracting Square Root	1	"

Algebra 16 questions, viz.*

Simple Equations	2	"
Quadratic Equations	2	"
Series	2	"
Permutations	2	"
Combinations	2	"
Binomial Theorem	3	"
Finite Differences	2	"

Geometry 4 questions, viz.

Four Problems from the 1st Book of Euclid

* The Arithmetic here is weak—*quis custodiet ipsos custodes?*

Local Examiners were entrusted with the 'two first Examinations' of candidates resident in Scotland. The arrangement gave rise to some doubt, which was soothed in one breast by the information 'that it is intended the papers should be the same and consequently there would be no difference in the effect of passing in London or Edinburgh'. There was no statement concerning the relative standards to be required in the answers.

In December 1852, Reports from the Examiners were received for the first time and so are reproduced:

London Report: 10 out of 11 candidates in England passed Matriculation Examination, 5 with great credit [and stated] in order of merit. The other

5 [are placed] in alphabetical order and to the last-mentioned five the Examiners have thought it right to recommend a careful re-perusal of the Books which comprise the subjects of the present course, particularly such portions of them as relate to 'series'.

Edinburgh Report: The answers are of various degrees of merit, and though in most cases not so accurate in result or clear in expression as might be desired, are still with perhaps one exception such as in the opinion of the Examiners fully to warrant the admission of the Candidates to Matriculation.

Even in the case alluded to, the Examiners are disposed in the circumstances and considering that this is the first of a series of Examinations, to recommend his admission also.

It is to be noted that the First Year's Examination is termed 'Matriculation' and that vigilant Scottish eyes discerned already the lack of clarity in expression that Examiners of the Institute have regretted even until now and that the Council has sought from time to time to remedy.

In April 1853, a gentleman reminded the Council that the Syllabus of the Second Year's Examination had not been issued. The details were settled in the following month, thus:

Outline of the Second Year's Examination

No. of questions			
10	Algebra	5	Theory of Logarithms
		5	Theory of Probabilities
10	Compound Interest	2	Values & Amounts of Annuities
		4	Increasing & Decreasing Annuities
		2	Interest payable at other intervals than Annual
		2	D'Alembert's Theory
10	Annuities and Reversions	4	On the different Methods of constructing Auxiliary Tables
		3	Values of Annuities or Reversions—immediate, temporary, or deferred—on two lives
		3	Values of Annuities or Reversions—immediate, temporary, or deferred—on three lives

The Second Year's and the Third Year's Examinations

At the earliest Second Year's Examination held in December 1853, there were nine candidates, all of whom passed, the marks secured ranging from 1,770 to 655.

The following Report from the Edinburgh Examiners is interesting for its general content, but particularly because of the raising of the important question of informing candidates of the material that they should study:

The Edinburgh Examiners have much satisfaction in being able to report that the several Candidates appear to them to have acquitted themselves in a highly creditable manner. The Examiners have not had sufficient leisure to go over the various answers in detail so as to be able to point out in what respect each of the Candidates may have fallen short. Indeed, they are not sure that this is expected from them.

The Edinburgh Examiners have with much deference to suggest that in the printed plan of the Second Year's Examination, notice should be given, as is done in that of the Matriculation Examination, of the different works to which reference will be had more particularly in the Examination. It will be seen that partly from the want of such notice Questions 13, 15 and 24 have been either imperfectly answered or left untouched. It may also be mentioned that Mr Baily's work to which special reference is made in the question had never been seen by either of the Candidates. It is indeed rarely to be met with in this quarter, and only one of the Examiners was possessed of a copy.

In March 1854, the Syllabus was completed by the following outline for the Third Year's Examination—it may have been changed to some extent a few months later, when the curt note appears 'Read and settled a revised Syllabus of the Examinations for the Certificate of Competency'.

Plan of Third Year's Examination

No. of
questions

- 5 As to the construction of Tables of Mortality and valuations:
Comparative advantages of the methods advocated by different writers.
- 5 As to Legal Principles:
Deeds of Settlement, Acts of Parliament, Partnership en commandite, Charters of Incorporation, Joint Stock Companies, powers and duties of persons comprising them, Policy considered as a contract, Probates and Letters of Administration, Assignees, and personal representatives.

No. of
questions

- 5 Statistical Principles:
Method for the arrangement, and collection of data, comparative tests of accuracy, preparation of Abstracts and reports.
- 5 Political Arithmetic:
General system of the Country's Finance, Funded and Unfunded Debt and Fiscal Arrangements, Taxation.
- 5 Currency Arithmetic:
Currency metallic and paper, Bills of Exchange, Nature of Banking, Bank of England, Private and Joint Stock Banks, Comparative value of Securities, Operations of the Stock Exchange, high and low prices, rate of interest.
- 5 Miscellaneous:
Office Accounts, Book-keeping, Audit, Correspondence, General routine, and Approximate calculations.

There is the following note at the foot:

Books to be referred to: Milne, Gompertz, Davies, Farren, Bunyon, Dowdeswell, Smith's *Wealth of Nations*, Tooke on *Prices*, Newmarch on *Supplies of Gold*, and on *Bills of Exchange*, McCulloch's Dictionary, Acts of Parliament relating to Banks and Banking, etc.

The wide range indicated by this reading is evidence of the desire to avoid undue concentration on purely technical matters. S. G. Warner, when President, gave witty advice in the same sense when he said (*J.I.A.* I, 184): 'as the Buddhist saint tries to get touch with the infinite by fixing his gaze for a succession of years on one small object in space, so the actuary may let the stream of affairs go by him unheeded, in rapt contemplation of a decimal point.' Any such attitude, or tendency, must be realized through watchfulness and corrected with unremitting patience.

The Third Year's Examination was not held until 1855: a year before it took place, the Examiners raised, in their Report on the 1854 First Year's and Second Year's Examinations, the great question of the need for discouraging at as early a stage as possible those candidates who should be considered unlikely to complete the full Course:

It should moreover be borne in mind that no one can now obtain a certificate of competency from the Institute without passing through the

The Position at the End of 1855

final or third year's Examination, and that to treat the shortcomings of a Candidate in either of the two previous years with an undue leniency is very likely by encouraging false hopes to bring about ultimate rejection and consequent loss of the certificate.

On the completion of the Examinations of 1855, the Examiners felt entitled to comment on the progress achieved by the Institute in its educational work:

We cannot conclude this report without observing that, as the test of examination is now generally applied in filling up Government and other appointments, and the importance of it so forcibly insisted on in the columns of the leading Journal of the day, it must be gratifying to the Council to find a plan laid down at the formation of the Institute, upwards of seven years since, so universally sanctioned and adopted in other professions. And, although in the Institute such examination is voluntary and not compulsory, it is the more creditable to those who submit to it, and it is satisfactory to know that in several instances the result has proved beneficial to those who have thus obtained certificates of competency.

By the end of 1856, a practice had been established of allowing persons to take the Matriculation Examination whose applications for admission to the Institute had not been formally accepted. But a candidate in Dublin was refused, with regret, a separate (i.e. apparently, local) examination, for which application on his behalf had been made because of his ill health.

There is a very curious feature in the Examiners' Report for 1856. After stating that they had adhered to the former plan 'of awarding a certain number of marks for the solution of each question' and that they had fixed the minimum total that must be obtained, they proceeded to pass several candidates who fell short. For the First Year's Examination, the minimum was 420 but an entrant was successful with only 343, while, in the Second Year's Examination, 4 out of the 5 candidates failed to reach the minimum of 580, but all were passed. No explanation of this discrepancy is apparent, unless it may be found in loose expression in the Report and be connected with the differential marking of certain optional questions. If, in fact, a minimum was laid down and then ignored, the departure from rectitude was specially unfortunate, since one of the so-successful candidates was an Assistant Secretary of the Institute who, as has

been mentioned earlier, robbed his employers of a considerable sum of money.

Thus far, the educational work had been conceived purely in terms of Examinations—the tests were available, the candidates must prepare themselves as they would and as they could. But, clearly, it was necessary to aid them, and, in January 1857, T. B. Sprague proposed the establishment of classes. The referees appointed to consider this suggestion ‘reported favourably on the formation of an elementary class for reading those parts of Algebra which are required in the Theory of Life Contingencies, provided that the Class would not mean any material expense’. It was suggested that Sprague should be the tutor and an advertisement was ordered to be inserted in the *Post Magazine* of a course for 10 weeks at a fee of 2 guineas. Only two applications were received and a further attempt was made by means of a circular to the Associates. Six members joined, but the tutor was to be paid on the basis of a minimum of twenty.

On the other hand, there was at least one aspirant who felt no need of adventitious aid. In April 1857,

Mr Mason asked to be allowed to pass the three Examinations in the same year and offered to pay the three years’ subscriptions in advance.

His request was refused.

The Examinations appear to have been advertised regularly in *The Times*, *Athenaeum* and *Post Magazine*.

In October 1858, the unending process began of revision of the Syllabus. The Examiners (who were functioning also as an Examination Committee) were desired to consider the question and ‘to see whether any of the Associates who have obtained the Certificate of Competency especially deserves the distinction of being proposed for ballot as a Fellow in terms of Article 6 of the Constitution and Laws’. The general tenor of the Report (as regards the First Year’s and the Second Year’s Examinations) is indicated by the following extracts:

We beg to report that, in our opinion, the number of questions proposed is too great for the limited time allowed for the Examinations, and we are convinced that, both in the First and Second Year’s Examinations, 25 questions will be amply sufficient to test the abilities of the Candidates, and will afford the probability that a greater proportion of them will be fully answered.

The Revised Syllabus of 1860

We would also suggest that in the Second Year's Examination, the subjects might be more varied, without requiring the study of works of a higher order than those hitherto referred to.

We do not see any necessity for specifying the books to be referred to, since if the Candidates are able to answer the questions to the satisfaction of the Examiners, and show that they have mastered the subjects, it cannot be considered a matter of importance what books they have studied for the purpose.

The actual division of the questions among the subjects needs not to be reproduced here, but attention is directed to the very inadequate treatment of the matter of indicating a Course of Reading. Being conscious of the difficulty of what are known now as 'Transitional Arrangements', the Examiners sought to avoid it by making as few changes as possible.

Actually, the new Syllabus does not appear to have been adopted until March 1860, when a final Report was accepted by the Council. The revised Plan for the three Examinations was published in *J.I.A.* ix, 115-16.

A minimum attainment of 50% of the total possible marks was specified for a pass in each Examination. There was only one candidate for each of the Second Year's and the Third Year's Examinations of 1860 and neither passed.

A Committee was chosen early in 1865 to consider further revision of the Syllabus and the time of the year at which Examinations should be held. This work led to the preparation of an 'additional Syllabus'. The Report made at the Annual General Meeting in June 1866 said that the aim was to supply more definite information upon 'the subjects to which candidates for the Institute Certificate should more particularly address themselves'. A syllabus 'of a supplementary or subsidiary nature' was forecast. Probably, something like a Course of Reading was intended: the Examiners continued to mention the need for it, for example (Report for 1865):

The result of this as well as of former examinations is such as to convince the Examiners of the urgent necessity that exists for affording to students some guidance in preparing for the examination. The standard works of Baily and Milne contain much which in the present state of the science had better be passed over by the student; while David Jones's work, useful as it is, is wanting in many things which it is important that candidates

should know; and they have no means of selecting for themselves from the volumes of the *Assurance Magazine*, and the writings of De Morgan, Gray and others those passages which would supplement the deficiencies of Jones.

More than one speaker at the Institute has found something to say about the heavy striking of the clock in the Old Hall of Staple Inn and of the effect on anxious candidates. This anachronic reference must serve to emphasize the subject of 'insufficient time'. In January 1867, the Examiners drew attention to the point thus:

The time allowed for answering the questions in the Second Year's Examination might be extended with advantage. They believe that by the present regulations quickness of solution is encouraged at the expense of accuracy—in fact that the paper is too long for the time. They think that the remedy for this is to be found, not in a further shortening of the paper, but in the lengthening of the time allowed for answering. They further think that five hours is rather too long for one sitting and they accordingly recommend that the Second Year's Examination should be divided into two parts of four hours each taking place on two consecutive days (or Saturdays). If this suggestion be adopted the Examiners think the number of questions might be somewhat increased with advantage.

The immediate effect of this Report was a resolution of the Council that it be reconsidered by the Examiners 'with a view of their passing such candidates as in their opinion were prevented from obtaining the requisite number of marks by want of time'. The Examiners did their best, but were not able to advise any addition to the pass-list. The Council had to be content with accepting a suggestion by T. B. Sprague that it should be announced in the *Journal* that one entrant had passed with distinction and that 'several of the other gentlemen, although none had quite reached the required standard, had acquitted themselves creditably and shown much industry and ability in their treatment of the questions'.

In January 1868, the Examiners for the Third Year's Examination raised the question of the hours allowed and advised, figuratively no doubt, 'that the time should be extended to two days'. A candidate for the Matriculation Examination complained on the same score and, in March, it was agreed that 6 hours should be given, by two 3-hour sittings on the same day.

Development of Tuition

The next step in the development of aid to students was an offer by the Examiners for the Second Year's Examination of 1868 to meet the candidates (and any other of the younger members of the Institute) for post-mortem discussion of the questions. The suggestion was approved by the Council.

A candidate who desired to take together the First Year's and the Second Year's Examinations was not permitted to do so.

An additional General Regulation was authorized in June 1869 whereby:

The Matriculation Examination shall not be required of a Candidate who shall have obtained a degree in mathematical honours from some University of the United Kingdom or of the Colonies.

In 1869, the Matriculation candidates reached 'the unprecedented number of twenty-three' and, in consideration of their 'extraordinary labours', each of the Examiners was requested to accept 'the complimentary sum of Five Guineas'. After a time, this grant became merely 'the usual honorarium'.

The Council decided in February 1871 to do a little more in the matter of a Tuition Class. It was resolved:

That it is advisable that the Institute should appropriate a sum not exceeding thirty guineas for a class for students preparing for the examinations if arrangements can be made with a lecturer for the current year.

There is evidence that the sense of need was felt more strongly by some than by others: the record refers to a 'Tutor or Lecturer whose appointment has been thought desirable by some members of the Council'. The Class was confined to Second Year's students and the Tutor was requested to give an unspecified number of additional lectures 'open to the members of the Institute'. Soon afterwards, more definite conditions were fixed: the grant of a 'subsidy' was contingent upon the formation of a class of not less than six Students, to be met by the Tutor twenty times or more during the year. He was allowed to receive from each student 'a capitation fee not exceeding two guineas' and was required to deliver three extra, open, lectures. W. Sutton was the Tutor and he attracted ten students for his first series. The Examiners reported, in due course, their opinion that the class had been of material assistance to the successful candidates.

In 1871, Examinations were held also in Edinburgh and in Dublin. Apparently, Examinations in Dublin were dropped later, since, in 1890, a request was made and granted for the facility.

T. B. Sprague wrote to the Council, in 1872, to support A. H. Bailey's reference to the neglect, in the Third Year's Examination papers, of 'Book-keeping and Office Routine'. He said:

The reason, of this, I believe, has been that there is not only no text-book on the subject, but not even any occasional papers to which students might be referred. It is unquestionable that these subjects are of the greatest importance to Actuaries and are essential to qualify them for what we consider their legitimate position as Managers of Offices; and I think it would be extremely desirable to take steps to encourage the study of these subjects.

He proposed that Messenger Prizes be offered for essays on the subject; the matter was referred to three members, but the idea was not carried into effect.

At the end of 1872, it was resolved that a fee of 1 guinea was to be deposited by each entrant for an examination, the amount to be returned to him if he did not pass. Revision of the Syllabus was to be considered by 'such of the Examiners of the last ten years as may be willing to serve'.

Recognition of the fact that marks are not enough was shown by the Examiners' Report, on the only Third Year's Examination candidate of 1872, who had 'obtained more than the half-marks required by the regulations', but who was not considered to have 'shown so thorough an acquaintance with the subject as could be desired'. He passed.

The first reference to the need for a text-book came in 1873 when the Tutor commented on the lack of sufficient algebraic knowledge shown by his students, on the absence of a text-book, on the difficulty of notation and on his own uncertainty about the real scope of the Syllabus for the Second Year's Examination. He made the following suggestions:

1. To make the theory of probabilities and the theory of logarithms part of the First Year's subjects. Also to raise considerably the standard for the First Year's Examination—many get through it now who are totally unprepared to enter with any degree of success on the Second Year's work.

The Revised Syllabus of 1873

2. To put Finite Differences among the Second Year's subjects and to require elementary differential and integral calculus.

3. To bring the elements of the construction of mortality tables into the Second Year's subjects.

He criticized the form of the Examination questions, pointing out that easy problems were set without any hint of the method of solution, the effect being that, generally, the candidates did not obtain proper results. He suggested, with illustrations of actual questions rewritten, that the principle should be stated and a rider set to be worked out.

In March 1873, a new Syllabus was approved for circulation among the members: it did not involve any radical changes of subject, but there were the following important general provisions:

(a) The minimum number of marks to be obtained for a pass to be raised from 50 to 60%.

(b) Third Year's Examination candidates to be required to show a competent knowledge in each of the several groups of subjects.

(c) Means to be found of keeping the standard of the Examination Papers more uniform from year to year.

(d) Consideration of further help to candidates in prosecuting their studies.

An application from a Fellow of the Faculty of Actuaries in Scotland to become also a member of the Institute was facilitated by a decision in 1873 that he be excused from passing the First Year's Examination.

The higher standard of marks imposed by the changes of March 1873 was not regarded for long as a satisfactory measure. At the Examination of December 1873, three First Year's candidates were reported as having obtained 555, 545 and 545 marks out of the maximum of 1,000 after every allowance had been made 'for accidental errors arising from haste or confusion'. The Examiners added that they did not feel the failure to be due to too high a minimum, but to neglect of preparation in certain subjects. The Council, however, wished that the three should be passed and referred the matter back to the Examiners, who adhered to their view and prevailed. There was difficulty also with the Second Year's Examination: some candidates who had not reached the minimum were recommended for a pass 'partly on account of the general character

of their papers and partly because, owing to the negligence of the printer, the papers were not delivered until more than an hour and a half after the appointed time, whereby the candidates were placed at a disadvantage for which we think some allowance should be made. We wish further to remark that our experience of this Examination has convinced us that the standard now fixed is too high and we suggest that it be at once reduced to the former level'. This mention of printers may recall to some an Examination after the War of 1914-19, when it was found at the end of the morning that some candidates had received the afternoon's paper, because of the reversal of labels on some packets.

A brighter picture was presented by the Third Year's Examination. There were only two candidates, it is true, but both passed with credit and were accounted equal—they were C. D. Higham and G. King. The Examiners permitted themselves to say:

We consider the result of this Examination is one on which not only the Candidates, but the Institute may be congratulated as it shows that the efforts made by the Institute to promote the study of the theory of Life Insurance are bearing good fruit.

The two men so praised were to give ample fulfilment of their early distinction.

A proposal, in 1874, that anyone who obtained three-fourths of the maximum number of marks should be considered as having passed with honours was not accepted by the Council.

The return of the lower standard of marks did not meet the twin anxiety of the Council to let students through the examinations and to maintain a proper level of qualification. The candidates themselves were at fault, as always they have been and will be: the 'Second Year's' Examiners of 1874 reported 'we notice especially that the practical questions were most imperfectly treated'. And the 'Third Year's' Examiners appealed for the restoration of the former minimum of 60% in that Examination. They feared that grave inconvenience would occur from passing, on a 50% standard, a candidate who, in their opinion, might 'be far from having shown that degree of knowledge which would entitle him to be considered a competent actuary'. It was decided to reinstate 'the clause requiring competent knowledge in each subject'.

Sutton's Text-book Begun

A development occurred when, in 1875, a new Assistant Secretary, G. R. Dick, M.A. (Cantab.), was appointed to undertake also the work of Tutor.

A notable step forward in educational work was made, in 1876, by the decision to prepare and publish a text-book on Life Annuities and Assurances. W. Sutton was appointed to do the work and his suggested syllabus was approved 'with certain alterations'.

The Examiners' Reports for 1876 can be described only as scathing—lack of elementary knowledge, incapacity to grasp principles, inaccurate and superficial work, untidiness and haste—all these and more were noted and condemned. It was remarked also that there was a need for ensuring that candidates should not be able to avoid some subjects almost entirely and yet to succeed in passing. But the Report for the following year was much better.

Nearly 30 years had elapsed since the establishment of the Institute and the account given of effort and accomplishment in the field under review shows how difficult a task had been undertaken. Nevertheless, a body of experience was being built up and there were signs of ampler provision for the help of students. Meanwhile, outside criticism occurred. In February 1877:

It was then brought before the Council that it appeared from certain public correspondence that the conduct and result of the recent Examinations had given rise to dissatisfaction and with the object of ascertaining the sense of the Council as to whether any and what notice or action should be taken with regard to the matter, it was proposed that the question be referred to a Committee for investigation and report, but the motion was negatived.

Apparently unperturbed by the agitation, the Council continued to do its work. In May 1877, G. King was appointed as Lecturer to Second Year's students and a new Assistant Secretary, C. H. W. Biggs, was required to take the First Year's Class.

Early in 1878, it was decided to hold future Examinations on two separate days in the last week of April, a 3-hour paper to be worked on each day. An Associate complained of the absence from the questions of any indication of the marks allowed for them and proposed 'several alterations in the procedure heretofore adopted'. The Council rejected all of them.

The titles of the Examinations were changed in April 1878 to 'Preliminary or First Examination', 'Intermediate Examination' and 'Final Examination' and it was agreed that, on application, any Associate who had obtained the Certificate of Competency would be admitted a Fellow without ballot, if the Council approved.

In November, it was 'resolved that a complete list of candidates who have passed the various examinations of the Institute be prepared for presentation at the next Annual Meeting': the operative word is 'complete'—some omissions had been discovered. The list appears in *J.I.A.* xxii, 73-6 and begins with two curt announcements:

- (a) that in future no examination fee is to be returned to unsuccessful candidates, and
- (b) that the examinations will take place in April.

The first text-book was taking shape slowly and it is clear that difficulty was being met. In December 1878, the author wrote thus:

The Committee towards the close of last session settled the questions of size of book, type and general arrangement. In consequence of this, a large amount of alteration had to be made in the part then written and partly printed.

The Council decided in July 1879 that, before a student was allowed to join the class for the Preliminary Examination, he should be subjected to a test. A few months later, the general problem was attacked, from the other end, by the adoption of a lengthy memorandum of suggestions to Examiners. Fixed requirements were stated and interspersed with comment and general indication, the matter of style in answers being given some prominence. The most important suggestion, the third, is reproduced here:

As the Examinations are neither primarily intended to determine the relative merits of the candidates, nor to determine absolutely their proficiency, but only to ascertain whether a candidate has a sufficient practical knowledge, for professional purposes as an Actuary, of the subjects of the Examination, the questions should be drawn up so as to enable the Examiners to judge:

- (a) Whether the Candidate has a sound knowledge of the general propositions and theorems relating to each branch of the subject, as far as the same are found necessary for professional purposes as an Actuary.

King's Text-book Begun

- (b) Whether a Candidate is sufficiently familiar with the aforesaid general propositions and theorems to apply them readily to practical examples.

The First Year's Examiners of 1880 tried, without success, to get rid of book-keeping and proposed that, in its place, Euclid's *Elements* should be restored.

By December 1880, the delay in the completion of the text-book was causing anxiety and it was resolved to publish the first part ('Interest') 'as soon as practicable'. In July 1881, this initial volume 'was almost completed' and the author, W. Sutton, informed the Council that if it 'desired him to proceed with the second portion, he could not undertake to complete it in any specific time'. He resigned in the following autumn and G. King was appointed to prepare the second volume. He undertook, probably under some pressure, to accept Part I 'as issued by Mr Sutton', to be extremely sparing in any redemonstration in Part II of any formula or process included in such Part I and not to make any references to that work should he, G. King, 'publish his own book on the subjects comprised in Part I'. King did prepare a volume under the title *The Theory of Finance*. He was also to 'consider himself bound in honour to complete the [Text-]Book—ready for publication—as speedily as possible'. He thought that it should be available by January 1884, provided that the Council should supply 'such clerical aid as may be found to be necessary'. He promised also not to accept 'any heavy work' that would imperil the completion of the book and to act under the general supervision of the Mathematical, or Text-book, Committee. In May 1887, this Committee reported

That Chapters 16, 17 and 18 of the Text Book have been passed subject to a revision and compression of Chapter 17 [on Successive Lives] by Mr King; and to political and controversial matters being omitted from the subject, together with the exclusion of the present sections 44 and 45.

In October 1887, the Text-book Committee reported that G. King, despite the devotion 'of his spare time and energies unceasingly' for several years, had had to abandon a part of the original plan, as being too expensive. It was believed, however, that the book embraced all the subjects intended by the Council. The stereotyping of most

of the pages had been done, but this unconsciously funereal allusion did not prevent the Committee from adding the proper tribute:

The volume speaks for itself and will be a lasting record of Mr King's actuarial skill, literary ability and unbounded zeal in the service of the Institute.

Nevertheless, the Committee was not anxious for any more work of the same kind:

Should the Council be desirous of extending the Text Book, so as to embrace such subjects as the graduation of tables, the valuation of Assurance Companies etc., the Committee consider that those subjects would form another volume, which could be called Part III of the Text Book; but they make no recommendation on the point.

The following Resolution was passed by the Council:

Resolved that the cordial thanks of the Council be given to Mr George King, the Editor of Part II, and that on the issue of the volume he be presented with an Arithmometer, with a Presentation plate affixed thereto, together with an honorarium of 200 guineas.

The 'entire and final cost' of the work was £874.

The last pre-Charter reference to be made on educational work is to a decision, in December 1882, that 'no honorarium be this year offered to the Examiners for the Preliminary Examination'.

There was a distinct lull regarding educational problems in the years immediately before and after the grant of the Royal Charter. The Council was much engaged with this matter and its many issues. Probably, it was wise to let some time pass before embarking on any large changes in educational arrangements in the new conditions. Meanwhile, the Examiners for the Final Examination of 1885 suggested that the future Syllabus should 'give more weight to questions of a practical character'. Junior members showed anxiety about the future plans and, 'numerous inquiries' having been received from them, the Council, in November 1885, asked the Bye-Laws Committee to report. It was decided, in December, that the existing Syllabus should apply at the Examinations of April 1886 and, later, that those who passed should be listed alphabetically, instead of in order of merit. Only seven candidates out of thirty-two passed Part I

The Quality of Candidates (in 1887)

in that year and, in view of evidence of hasty preparation by men whose 'mathematical knowledge acquired at school' had 'faded away', the Examiners suggested that a test should be imposed before applicants were admitted as Students. The Part II Examiners reported that additional questions had been set on the elements of the Differential and Integral Calculus but that only one candidate (out of fourteen) had attempted them. These additional questions were headed thus in the paper:

The following question(s) is/are optional on the part of the Candidate.

In June 1886, the Examination Committee was asked to appoint Tutors for the classes for Parts I and II and to draw up a course of study for each of the three Parts.

At the Council Meeting of April 1887, various Students were ordered to be admitted without examination, but A. W. Watson (later, President) was required to undergo a test.

A new problem arose at the Examinations of 1887—there was serious overcrowding at the sittings and the Examiners requested that it be not allowed to occur again. The Reports on the quality of candidates continued to be unfavourable. Thus, for Part III:

In preparing the questions we had in view two general ideas—1st To ascertain the extent of the candidate's knowledge of the works he ought to read, and 2nd to ascertain his power of concentrating his thoughts and applying his knowledge to practical questions. Considering that the time allowed to answer the usual number of questions is very limited, we purposely asked such questions on mere book work as would take but a short time to answer; and in order to reduce the number of questions requiring time and thought we devised a plan of giving alternate questions, which had the further advantage of allowing the candidate to select the subject which he knew most about. We must confess that we have been disappointed with the result. There was a large supply of mere *cram* work, but almost a total absence of individual intelligence and independent thought. We are of opinion that it should be more widely made known that the object of the third part of the examination is not only to ascertain the extent of the candidate's reading, but to test his powers of applying his knowledge, both scientific and literary, to the solution of practical questions. We have on the present occasion given a most liberal allowance of marks for anything indicating an intelligent treatment of a question, although it may not have been answered correctly.

The Examination Committee, in passing on these Reports to the Council, showed plainly that it felt that changes were necessary in the plan of the Examinations. The Committee proposed, on the publication of the text-book, 'to issue a list of books in which questions shall be set and to prescribe special courses of study in particular subjects'. It felt also that the Part I Examination could be held with advantage twice a year. This latter recommendation was adopted and the Committee was given the strange task of considering 'whether a competent knowledge in Part I of both Arithmetic and Algebra should be made obligatory'.

It 'occurred' to the Part II Examiners of 1888, 'for instance, that questions relating to Office practice' had disappeared from the papers of recent years.

A Summer Class for the Part I Examination of October 1888 was permitted 'subject to an arrangement being made with respect to the opening of the Rooms in September and to the Institute being free from expense'.

A further tightening of control was effected in February 1889 when it was decided that Instructions to Examiners be issued—formerly, the Council had given 'Suggestions'.

In February 1890, some important innovations were proposed, and adopted from 1891:

- (a) Successful candidates to be arranged in 3 Classes: at least 75% of the marks to be necessary in Class I, 60% in Class II and 50% in Class III—the names to be in alphabetical order in each Class.
- (b) The Optional subjects in the Syllabus to be made obligatory.
- (c) Four hours to be allowed for each Paper in Part III.

But a suggestion that Credits be allowed was not accepted and many years were to elapse before the idea bore fruit.

The opportunity was taken during 1890 of issuing revised Rules to regulate the Examinations. The power was retained to have viva voce Examinations and candidates for admission as Students were to pass, if so required, a test in the following subjects:

1. Writing from dictation.
2. English composition.
3. Arithmetic.
4. Elementary Algebra (not beyond Equations of the first degree).

THE
INSTITUTE OF ACTUARIES

Established 1848 and
Incorporated by Royal Charter 29 July 1884

THIS IS TO CERTIFY THAT
*after due Examination, as prescribed in
the Charter and Bye-Laws, in Subjects
appertaining to the profession of Actuary*

was on the day of
Nineteen Hundred and admitted a

FELLOW OF
THE INSTITUTE OF ACTUARIES

IN WITNESS WHEREOF, *the Common Seal of the Insti-*
tute has hereunto been affixed this day
of- Nineteen Hundred and
By order

.President

*{ Members of
the Council
- }*

THE CERTIFICATE GIVEN TO NEW FELLOWS

The Certificate Given to Fellows

A candidate failing in this test was to be given one further chance, to be taken within 6 months after the date of the first trial.

The provision was retained for two Examinations each year in Part I, the Syllabus of which still included 'Principles of Book-keeping'. The Examiners in that Part reported, however, in 1890 their doubt of the practicability and value of the subject for Part I. A similar view had been expressed some years before.

It was recommended in October 1890 that the practice be resumed, and made retrospective if possible, of issuing a Certificate to each person who passed all the Examinations.

Complaints continued of the quality of Students, both admitted and potential. In November 1890, T. E. Young (Examiner of Entrants) reported thus:

Having now had a long experience in the examination of gentlemen applying to be admitted as Students, I have to express my great regret that, as a whole, they have been men of very inferior education and capacity; this is shown not merely in respect of elementary mathematical knowledge, but also in regard to composition and spelling.

Still, if many failed, a few were successful, and for them a Certificate (no longer called a Certificate of Competency) was prepared in form following:

This is to certify that, after due examination as prescribed in the Charter and Bye-Laws, in subjects appertaining to the profession of Actuary,

.....
was on the day of Eighteen Hundred
and..... admitted a Fellow of the Institute of Actuaries.

In Witness whereof, the Common Seal of the Institute has hereunto been
affixed this day of.....Eighteen Hundred and

By order,

..... Members of
..... the Council (Seal)

A photograph of the actual current form is reproduced here.

In 1890, Melbourne, Sydney, Wellington, Cape Town and Montreal were approved as Examination centres. Later, the general principle came to be almost that wheresoever a candidate was, who

could not go to an established centre without undue trouble, he should be examined locally (even on Active Service) provided that efficient supervision could be arranged. The Council was careful to prescribe that these far-away Examinations should be held once a year 'and as nearly as possible on the same day or days' as in this country.

All these miscellaneous, though individually significant, arrangements were leading to a comprehensive review of the Syllabus. The immediately exciting cause of this work was a curious motion by the President, in February 1891, that the Examination Committee consider 'whether any modified form of Examination, or other Test, might be adopted as the means of admission to the Associateship of the Institute'. Before it could report on this matter, the Committee was ordered to inquire into 'the whole question of the Classes and their results'. On this latter reference, the Committee proposed that the Tutor in Part I should take his own steps to see that applicants had a fair knowledge of algebra up to and including quadratic equations and that there should be only one official class, but that the Tutor might have a private junior class if he wished. The Tutor in Part II was to have elementary and more advanced classes and 'to judge as to which each student is to enter'. This subdivision of the Part II class was withdrawn after a short time.

In October 1891, it was recommended that the time allowed in the Part I and the Part II Examinations be increased to 4 hours per paper.

The Report of the Examination Committee on the admission of Associates was issued as a printed document, of which the following important extracts are reproduced:

The Examination Committee have, at several meetings, carefully considered the question, referred to them by the Council, of the admission of Associates by other channels than the usual Examinations, but do not see their way to recommend two standards of Examination for admission to the Associateship. The Committee, however, recommend that the whole Syllabus of Examinations be re-cast, with a view to make admission to the Associateship more easy, while not reducing the standard required for the Fellowship, the revision to be made on the following lines viz.:

- (a) That there be two Examinations, as at present for the Associateship, to be followed by two Examinations (not one as at present) for the Fellowship.

The Revised Syllabus of 1892

- (b) That the Differential Calculus and other abstruse subjects be removed from the syllabus of the Associateship Examinations, and placed in the syllabus of the Fellowship Examinations.
- (c) That some of the practical subjects of the syllabus of the Fellowship Examinations be transferred to the syllabus of the Associateship Examinations.
- (d) That no one shall be admitted a Fellow of the Institute under the age of 25.

W. Sutton submitted a long, critical memorandum, which was referred, with the general question of revision of the Syllabus, to the Examination Committee. In brief, the points made by Sutton were:

1. A protest against deferring the grant of the Fellowship to age 25.
2. A statement that experience had taught him the failure in practice of his former view that 'Elementary Differential and Integral Calculus' and 'The application of the Higher Mathematics to the Theory of Life Contingencies' should be in the Syllabus. It had appeared to him 'that it was extremely desirable that the Actuaries of the future should be—to use a well-known phrase—not only just up to their work, but well over it—in other words that their mathematical acquirements should be considerably beyond those they would, in the ordinary course of practice, be likely to require'. He felt now that it was not reasonable to expect this level from all and preferred to remove subjects rather than to have a mere 'smattering' of the principles.
3. The desirability of increasing the number of Papers to three in each Part.
4. Strong advocacy of 'book-work and rider' as the typical form of a question. Candidates were not sitting for a Mathematical or Classical Tripos, but only for a Pass Examination. He added 'It has always been my belief that to departures on the part of the Examiners from this principle is to be ascribed much of the unsatisfactory result connected with the Institute Examinations'.
5. Draft Papers to be submitted by the Examiners to the Examination Committee, which should have power to modify questions as it might think fit.
6. Continuity of Examiners and payment for their services.
7. Issue of a Course of Reading in all Parts.

This very important contribution is worthy of study even now, when so much that it advocated has been introduced.

The issue was settled in April 1892; the Council agreed to a new

Scheme, to come into force in April 1893, as regards Parts I and II, and in April 1894, as regards Part III. The Syllabus and Rules were published in the *Journal* (xxx, 164). Here, only the preamble of the final Report is given:

The Examination Committee have very carefully considered at several Meetings the question of the revision of the Syllabus of Examinations, remitted to them by the Council. In view of the expressed desire of the Council to make admission to the class of Associate less difficult as regards mathematical subjects, and to introduce into the Associateship Examinations the elementary portions of some of the practical subjects, changes are proposed of which the following are the more important.

PART I

To strike out from this Examination the Elements of Finite Differences, Elementary Plane Co-ordinate Geometry, and Euclid, except Books I, II and III, and to introduce the Elements of the Theory of Compound Interest, including Annuities-Certain.

PART II

To strike out Elementary Differential and Integral Calculus, and to introduce the Elements of the Law relating to Life Assurance Policies and their Assignment, and the Investments of Life Assurance Companies other than Life Interests and Reversions.

PART III

To divide Part III into two sections, the Candidate to be permitted to take both sections in one year, or to postpone either section to a subsequent year. To include in this Examination the subject of Finite Differences, which was formerly in Part I; also the subject of Sickness Tables and Friendly Societies, now brought into the Syllabus for the first time.

The minimum age for Fellowship was left at 21 'in view of the difficulties of making a change'. Graduates in Mathematical Honours of any University in the United Kingdom would be exempted from Part I and Fellows, by Examination, of the Faculty of Actuaries would be eligible for admission as Associates without passing Parts I and II.

These major questions having been resolved, the Council proceeded to deal with the subjects of payment of Examiners and of their continuity in office. The former was settled by a decision that, for Part I, an experienced paid Examiner be appointed, not necessarily from among the members of the Institute, and that he be assisted by

Admission of Members of the Faculty of Actuaries

two Moderators who should be members of the Examination Committee. Prof. S. L. Loney was chosen, from among twenty-one applicants; he acted thus for many years. The second point was met by providing that, as far as possible, only one new Examiner should be appointed for Part II or Part III in any year.

Other incidents of the time were the receipt of applications, some refused, for permission to translate Part II of the text-book into foreign languages; the making of special arrangements for members of the Jewish race to take Examinations that were held on Saturdays; and a decision, in May 1893, not 'at present' to hold Examinations in the United States (this decision was confirmed some years later, the ground being that it was not thought desirable to examine outside the British Empire). The Examiners in the various Parts were ordered to confer before setting papers, so as to prevent overlapping.

Despite the provision in the new Syllabus whereby Fellows, by Examination, of the Faculty of Actuaries could be admitted to Associateship without passing Parts I or II, some curious cases occurred in 1893 and 1894. One F.F.A. had been actually accepted for election as an A.I.A., but it was found, before the ballot, that (with Scottish humour, or excess of zeal) he had sat for the Part II Examination of the Institute and had failed. The Council withdrew the name from ballot and (one feels, unkindly and unnecessarily) ordered the Examination Committee to consider 'whether a register of unsuccessful candidates in the Examinations should be kept and, if so, what form it should take'. The Committee was required also to report on a suggestion that Fellows of the Faculty of Actuaries should be recommended for election as Associates of the Institute only when, in the view of the Council, 'all circumstances' were favourable. This last condition could not be expected to be helpful with regard to the discussions that the Examination Committee was carrying on, even then, with the similar Committee of the Faculty, in the hope of arranging joint Examinations for the two Bodies. The effort failed, as, thus far, have later negotiations conducted without the handicap just noted. Finally, the Council adhered to the letter of its law when, in October 1894, it refused the Associateship to a member of the Faculty of Actuaries who had passed all its Examinations, but was still only an A.F.A. Even in 1895, a request by a Fellow of the Faculty of Actuaries for admission as an Associate was approved only 'subject

to its being ascertained that the applicant had not presented himself for any of the Examinations of the Institute of Actuaries'.

Contact was established with the University of Cambridge Local Examinations and Lectures Syndicate when, in December 1894, it asked for and received permission to state in its Regulations that the Senior or Junior Certificate (if including algebra) would carry the right to exemption from the Institute's Examination for admission to the class of Students.

On receiving an invitation from the London Chamber of Commerce to a Conference on Commercial Education, the Council decided, in October 1895, 'that the Institute was not prepared to alter its present standard of Examinations or to hand over the matter to another Body'. Nevertheless, it was agreed shortly afterwards to accept the Chamber's Junior Commercial Certificate in lieu of the Preliminary Examination of the Institute.

A professional Examiner in Law having been suggested, it was resolved in 1896 to appoint a 'Legal Assessor', at a fee of 10 guineas, to assist the Examiners in Part III 'in framing the legal questions and assessing the answers'. The Tutor in Part II at this time used words tending, perhaps unconsciously, towards Correspondence Courses when he reported that he had issued a series of notes on the various methods used in the construction of Mortality Tables, because he 'found that time did not conveniently permit of the students' being referred to the various papers on the subject'.

In June 1896, the Examination Committee submitted to the Council, 'in case it should be found of any interest or use to you, a statistical statement showing the percentages of passes when considered in connexion with the number of times that the various candidates have presented themselves. This applies to all the candidates, British or Colonial'. The exposed to risk and the proportion passing were said to be:

	No. of candidates	Percentage passing
1st trial	37	30
2nd „	23	43½
3rd „	5	60
4th „	2	0
	<hr/> 67	<hr/> 36

The Short Collection of Actuarial Tables

A new edition of Sutton's Part I Text-book being required, he was invited, in November 1896, to revise the work, but, eventually, the Text-book Committee found that so many changes would be necessary, partly because of alterations in the Syllabus, that the matter was dropped for the time being. Eventually, a new book was written by R. Todhunter.

A small pamphlet was recommended, in 1897, to be prepared 'for the use of the Examiners only, containing the Tables enumerated by the Examiners and the 4-figure Logarithm card added'. The use implied here was, of course, use by the candidates under the control of the Examiners. The plan was developed into the well-known *Short Collection of Actuarial Tables* and, on the completion of the work, the Council recorded its thanks to G. J. Lidstone for the trouble that he had taken in preparing the volume. The book was intended primarily to be a test of an examinee's ability to handle tables intelligently, but it has had very much wider use. With considerable additions to meet new needs, it is current still.

In 1897 and the years following, several courses of lectures were delivered before the Institute by non-members specially appointed, thus:

'On the Law of Real Property in England' by G. Wood Hill. 'On the London Daily Stock and Share List' by G. Clare. 'On the Companies Acts' by A. C. Clauson. 'On the Law of Mortgage' by W. G. Hayter.

The Part II Tutor reported, in May 1897, that he had tried, without much success, the experiment of having an Unseen Test worked by the class on an extra evening and of giving the men a chance of asking for individual help.

The Part III Examiners criticized the candidates for committing to memory and reproducing stock answers conveyed by their Tutors. This mention of Tutors for Part III refers to the practice in vogue at the time whereby certain of the members of the Institute conducted private classes for the Examinations. There was also a well-known business devoted largely to providing tuition, orally or by correspondence, for the Examinations of the Institute and the Faculty: many of its tutors were qualified actuaries. Eventually, the undertaking came under the control of W. F. Marples, a Fellow of the Institute, and was acquired by the Institute and the Faculty of Actuaries when, jointly, they inaugurated the Actuarial Tuition Service.

The difficulty experienced by students in obtaining access to certain papers was raised by an Associate, in March 1898, who inquired whether the Council was likely to reprint them. The answer was 'No'. In later years, the problem became really acute and has been met by the issue, from time to time, of various reprints.

In May 1898, the Part III Examiners urged that the Syllabus of Examinations should be revised. They found difficulty in determining the boundary between Parts II and III (Sections A and B); they felt that 'Finite Differences' should go back to Part I or, if not, should be placed in Part II; and, though approving the division of Part III into two sections, they considered that the Syllabus of May 1890 was clearer and more logical in distribution and arrangement. They wanted, also, separate sets of Examiners for the two sections of Part III, subject, of course, to the taking of proper measures to prevent clash or overlap.

The Part II Tutor for the Session 1897-8 'begged leave' to draw the attention of the Examination Committee to one of the questions set at the 1898 Examination. Like many others in these later days, he was apprehensive of usurped and creeping power and he pointed out that any extension of the subjects of the Examination would make extremely difficult the covering of the ground in a single Session. In its Report to the Council, in October 1898, the Committee submitted revised Regulations and Syllabus and confessed that the current scheme 'had not met with the success anticipated'. The chief points of the new plan (published in full, *J.I.A.* xxxiv, 413) were:

1. The establishment of a new class of non-members, called 'Probationers'. They have been mentioned earlier in this book.
2. The requirement that a candidate for admission as a Student must pass Part I.
3. The remodelling of the Syllabus thus:
 - (a) *Part I*: Exclusion of 'Euclid', but reinsertion of 'Finite Differences'.
 - (b) *Part II*: Restriction generally to the subjects of the Text Book (both Parts), excluding Graduation and the more advanced portions. Addition of the elementary applications of Finite Differences and of the Differential and the Integral Calculus to Life Contingencies as a stepping-stone to the advanced portions of the theoretical work in Part III.
 - (c) *Parts III and IV*: Established to replace Part III, Sections A and B, Part III covering advanced Special or Actuarial subjects, and Part IV Legal, Financial and other general matters.

The Revised Syllabus of 1898

The new arrangements were brought into operation in stages: Part I in 1900, Part II in 1901 and Parts III and IV in 1902.

The Committee tried to meet the possibility that a person might pass all the Examinations without becoming a member and might then claim to be made a Fellow. It was also concerned with the smaller point that a Student might jump from that class to Fellowship and so cause some loss of income to the Institute. On the advice of the Institute's solicitors, the first matter was left to be considered if it ever arose in practice, and the second was not pursued as it would have involved a change in the Bye-Laws. There are still Fellows who were never Associates, and it may not be wholly improper to mention that some adopted this course because a very distinguished servant of the Institute pointed out that the published Regulations specifically permitted them to do so!

Fifty years had gone since the establishment of the Institute and the new arrangements were no unworthy feature of a Jubilee that received no specific commemoration.

The first important step in educational work, in the second half of the period under review, was the decision, in February 1899, to ask R. Todhunter to edit a new edition of Part I of the text-book. Soon afterwards, the stock of Part II of the text-book needed replenishment and G. King undertook the work of revision. It was remarked many years later, in a review of his work as a whole, that, had he brought himself to initiate a healthy process of generous modernization, he might have ensured the virtual immortality of the book. Unfortunately, what he did was indicated, in his own words, thus:

Notwithstanding the foregoing changes and some others of less importance, it has been found possible so to plan that each chapter should begin and end on the same pages as in the First Edition, an arrangement not without its conveniences.

There were still complaints by the Examiners concerning some of the candidates. The Part II Examiners of 1900 put the matter concisely when they said:

In some cases the papers sent in display so little grasp of the subjects dealt with that it is surprising that the candidates considered it worth while to submit themselves for examination.

The names of successful candidates were removed from the *Annual Report* after 1901, but were published in the *Journal* and issued to the Press.

Division of the classes into two sections, elementary and more advanced, was suggested to the Tutors, in 1902, for reintroduction—it had been tried and withdrawn some years before.

The subject of making Manchester an Examination centre had been broached more than once by members there, but the Council maintained its refusal and, in 1903, gave as the reason that it was not prepared to depart from the existing practice of holding Examinations in the United Kingdom only in the three capitals.

Early in 1904, one of the Tutors asked permission to charge to his students a small fee for some notes that he had prepared on Finite Differences. The Council agreed that he receive a direct contribution of £20 from the Institute towards the cost of printing the Notes and thus a possibly awkward precedent was not created.

A candidate in Edinburgh, through a misunderstanding with railway officials, arrived 55 minutes late for one of the papers in the 1904 Examination, but was allowed by the supervisor to sit for the full period. The Examination Committee, after careful deliberation, recommended that the irregularity be overlooked.

The practice began in 1904 of issuing a pamphlet containing the Examination Papers of the last few years, together with the Syllabus and Rules.

To help examinees, it was agreed, in October 1904, that the total time in each of Parts II, III and IV should be increased from 8 to 9 hours and that three papers of 3 hours each should be set. Further, it was considered that some of the questions set in recent years 'seemed to be of great length and intricacy' and also that the Examiners, 'unconsciously and with the laudable desire of finding good questions', had gone beyond the intentions of the Council with regard to the Syllabus. It was suggested that questions really belonging to one Part had 'found their way into the Examinations of preceding Parts'. These undesirable features were met by fresh instructions and by a slight rewording of the Syllabus.

During the Session 1904-5, G. F. Hardy delivered his famous course of lectures on 'The Theory of the Construction of Tables of Mortality and of similar Statistical Tables in use by the Actuary'.

The Revised Syllabus of 1908

A proposal to form classes for the subjects of the Parts III and IV Examinations was carried into effect by arranging, in 1905, that G. King should be Lecturer 'for Part III and the Mathematical portions of Part IV'. The Examination Committee recommended, and the Council agreed, that he be given the title of 'Lecturer' as from 1 October 1905 'on the condition that he do not hold concurrently any similar appointment'. Apparently, it had been proposed that he be 'Principal Lecturer' and that the tenure of the post 'shall not interfere with the holding of any other Office in the Institute excepting membership of the Examination Committee'. The Institute was to pay for lithographed sheets of formulas, etc. 'to avoid the necessity of using the blackboard'.

In 1906, the Council decided to extend the exemption from Part I allowed to graduates in mathematical honours of Universities in the United Kingdom: for the future, similar honours obtained at any University in the British Empire were to be admissible for the purpose. During the same year, W. P. Elderton's book on *Frequency-Curves and Correlation* was offered to and accepted by the Council.

Again, the shadow loomed of large-scale revision of the Syllabus and Regulations. In October 1906,

The subject of the Institute Examinations, having regard to the low percentage of passes during recent years, was discussed.

The matter was referred to the Examination Committee for consideration and report.

A Sub-Committee was appointed, and, in its first Report, made some remarks of great significance:

1. On the whole the Examinations had been fair and reasonable and there was no evidence either that any really competent man had failed or that any unfit candidate had obtained a Diploma.

2. The root difficulty was the want of sufficient general education and the slight mathematical knowledge or ability in so many of the students. In other professions, there was a certain automatic selection by reason of the cost of apprenticeship and of education in the interval between leaving school and earning a living; but clerks in Assurance Offices tended to enter for the Examinations of the Institute, whether fit or unfit.

3. The existing Part I Examination was not a sufficient test of fitness to proceed to Part II.

The Sub-Committee made several recommendations and prolonged consideration followed. Eventually, in 1908, revised Rules and Syllabus of Examinations were issued (*J.I.A.* XLII, 418) to come into force from 1909 as regards Part I, and from 1910 for the other Parts. A memorandum was published with the general note that the intention of the alterations 'is to rearrange and reapportion the subjects on a more systematic basis and thus to ensure that each stage of the work shall more fully prepare the candidate for succeeding stages'. The chief alterations were:

Probationers: Applicants must satisfy the Council as to their general education on lines laid down in the Rules—a similar requirement to apply to Colonial and Foreign candidates who applied for admission as Students, subject to their passing Part I.

Part I: Candidates for Part II being handicapped frequently by the want of previous study of the principles of the Differential and Integral Calculus, the subject was introduced into Part I—the questions set would be of an elementary type.

Compound Interest and Annuities—Certain had been transferred to Part I, the standard to be as before, but the questions might involve the application of the Calculus. Largely because of this transfer of a subject to Part I, no exemption was given to Graduates in Mathematical Honours of any University in the British Empire, but they would be allowed to take Part I and Part II in the same year, provided that failure in Part I would mean automatic loss of Part II, even though a pass standard had been reached in it.

Part II: This would cover practically the same ground as the old Syllabus, apart from Compound Interest, etc. Questions might involve the Differential and Integral Calculus. New Sections introduced would cover:

- (a) Classification of Policies for valuation and the Preparation of Valuation Class Books.
- (b) Book-keeping with special application to Life Assurance Accounts.
- (c) The Constitution and Operations of the Bank of England; the National and Local Debts of the United Kingdom.
- (d) The principal classes of Stock Exchange Securities and practical questions arising in connexion with their purchase and sale.

Sections (b), (c) and (d) would lead towards corresponding items in later Parts. The Council would arrange and publish a Course of Lectures covering (c) and (d).

Part III: The old Part was being reproduced (except for Reversions) with the addition of Accident Statistics and the Valuation of Employers'

Appointment of a Board of Examiners

Liability Insurance Companies. Under a new Section, candidates would be expected to show some knowledge of the statistical information available in works not professedly actuarial in nature and scope.

Part IV: The scope would be practically that of the old Part with the addition of Reversions, etc. from Part III, and the Law relating to Employers' Liability Insurance Companies. Parts III and IV could not be taken in the same year.

This new plan marked a fresh approach to the problem of educational work; no longer was it to be comparatively easy for large numbers of miscellaneous entrants to take Part I and, having thus embarked on the actuarial course, to find, to their friends' disappointment and their own confusion, that they were quite unfit to meet the special demands of the later Parts. The changes were introduced mainly in the interests of the aspirants and were the long-ripening fruit of 60 years of travail and experiment.

Various other suggestions had been made and much thought was given to the problem of covering, in one way or another, the needs of non-actuarial members of Assurance Companies' staffs. Incorporation of fresh subjects in the actuarial curriculum, and the framing of a separate Syllabus with associated Examinations, were considered, but, in the end, it was not felt possible to meet the problem. Since that time, the 'Life' Examinations of the Chartered Insurance Institute have developed to fill the gap.

Another most important step in connexion with the revision of the scheme of Examinations was the appointment of a Board of Examiners, responsible for all Parts and intended to secure the building of a body of consistent doctrine.

An interesting arrangement was reported in 1907 whereby the University of Liverpool provided local tuition for Parts I and II of the Examinations.

The Council redeemed its promise of Lectures for financial subjects by securing, in October 1908, a course from J. Burn. As *Stock Exchange Investments* the published lectures proved for many years to be a most useful addition to the material available for Students at all stages of their careers.

The immediate effect of the new Syllabus was a marked fall in the number of candidates. This was recognized by a decision of June 1909 to increase, for the time being, the class fee in Part II. Soon

afterwards, one of the joint Part I Tutors asked for permission to continue, in May and June, his course for Students taking 2 years. The Council had no objection but added, gratuitously, that no increase of honorarium should be expected.

Although 'Instructions' had been issued to the Examiners, it was decided in 1910 that, so far as they were concerned, the word was synonymous with 'Suggestions'.

From time to time, various outside Examinations were approved as evidence of fitness to be admitted to the class of Probationers. Where a specific test was required by the Council, the Examination was to be made by the Birkbeck College.

A. W. Watson agreed to deliver a course of lectures on 'Friendly Societies' during the Session 1911-12.

In June 1914, it was agreed to remove the restrictive words 'within the British Empire' from Rule 1 of the General Regulations for the Examinations, so making it understood that the Council might establish foreign centres. Soon afterwards, the Faculty of Actuaries very courteously intimated that it had been asked to examine in Birmingham: the Council replied that it would see no objection should the Faculty decide to agree.

The War of 1914-19 disrupted the educational work of the Institute. Examinations ceased after 1915 and classes were given up.

While the war was yet raging, and still for long to rage, with awful ferocity, the tide of thought and action began to turn. Thus, in March 1917, consideration was given to the question, raised by the Board of Education, of assisting British prisoners of war in enemy countries and internees in neutral lands to study and to take examinations. The Council did not think the scheme practicable for actuarial students, but expressed its general sympathy and promised that 'every possible facility in regard to time and place of examination would be afforded such candidates after the War'.

The first mention occurred, as early as October 1916, of the important subject of the demobilization of the younger members so that they might resume their studies as soon as possible. The inquiry came from the Government's 'Reconstruction Committee (after War)':

It was decided to point out to the Committee that the requirements of the actuarial profession do not allow of any relaxation in the standard of

Alleviation for Students after the 1914-19 War

the examinations or the remission of any portion of them but that the endeavour will be made to arrange special facilities for the examination of those candidates whose training has been retarded by the war.

It was also decided to suggest that, as far as may be found practicable, members and students of the Institute serving in the Army and Navy may be released at or about the same time and as soon as possible after the cessation of hostilities.

The matter continued to receive attention, but nothing definite is recorded.

As the flames of war were dying down, the question was mooted, by the War Office, of 'reopening the examinations and holding them in the Field for students on active service':

It was resolved that steps be taken to ascertain whether there is any general desire amongst the members concerned for a resumption of the examinations before the termination of the war, and that the results of such enquiry should be referred to the Examination Committee with power to act.

In December 1918, on the invitation of the Ministry of Labour, a representative of the Institute was nominated to serve on an Advisory Board to be set up in connexion with the Appointments Branch of the Demobilization and Resettlement Department.

Early in 1918, the Council approved some far-reaching proposals to help students on the resumption of their work after the war. In brief, the general principles of alleviation were (*J.I.A.* LI, 71):

1. To reduce the number of subjects of examination, and in this way to restrict the scope of the necessary reading.
2. To request the Board of Examiners to afford candidates some guidance in the reading required; and
3. To hold Examinations more frequently.

The new Regulations and Syllabus were to remain in force for not less than 4 years from the date of the first Examinations held after the termination of the war.

The chief specific changes are summarized hereunder:

1. Examinations to be held half-yearly in June and December, or at such other times as the Council might prescribe.
2. The names of successful Candidates in each Part or Section of a Part to be arranged in alphabetical order, without distinction of Class.

3. Part I and Part III each to be divided into two Sections, A and B. Part IV to consist of three Sections, A, B and C (of which only A and either B or C must be passed).

4. The Sections of any Part so divided to be taken in any order that the candidate might choose, either singly or both at one examination.

5. *Part II*: Sections (2)-(5) of the former Syllabus to be dropped.

6. *Part III*: The History of existing Tables to be removed and Sections (5) and (6) of the former Syllabus to be transferred to Part IV.

7. *Part IV*: The 'Law' content of the former Syllabus to be reduced and Sections (5) and (6) to be dropped. The National Insurance Acts and the Elements of Statistics, etc. to be added (in one of the optional Sections).

These sweeping changes applied to all candidates, whether retarded or new. Though sharing fully the desire of the Council to help those members whose work had been interrupted by the war, the Students' Society made representations in 1919 on the general subject of the new Syllabus and Regulations, the desire being that the standard required for the Fellowship of the Institute should be restored as soon as possible.

Examinations were resumed in June 1919 and some special lectures in Parts I and II were arranged to be given in the months immediately preceding. Classes were re-established in the early autumn of 1919 and various means considered for extended help in the way of lectures for Parts III and IV and for post-graduate work.

In June 1920, a Supplement to the *Short Collection of Actuarial Tables* was ordered to be prepared.

An indication that the temporary post-war plan for the Examinations was regarded as needing early review came in 1920, when the Examination Committee was instructed to report on a proposal 'that the Council should announce that students are not expected to confine their reading to the Course suggested'. In February 1921, 'the question of the revision of the Examination Syllabus' was referred to the Committee for consideration and report. It had been decided, just previously, that Examinations should be conducted at yearly intervals from April 1922 inclusive: thus, the half-yearly feature lasted for less than 4 years, despite the apparent meaning of the Regulations published in *J.I.A.* II, 71.

The Revised Syllabus of 1922

EFFECT OF THE NEW SYLLABUS

The new Syllabus was brought into effect from 1923, for Parts I and II, and from 1924, for Parts III and IV. It involved, naturally, a reaction from the special curtailment allowed so sympathetically for a season after the war. But its chief interest lies not in that fact, but in the indication that it gives of the educational policy of the Institute, as it faced the changed conditions of what was believed to be a new time. There was no mere return to something like the pre-war Syllabus that had been adopted in 1908 after such prolonged consideration.

The Council announced the fresh plan in the following words (*J.I.A.* LIII, 370):

The general scheme of the revised Syllabus is to examine candidates in three groups of subjects, namely:

- (a) purely mathematical subjects;
- (b) subjects involving the application of mathematical theory to actuarial questions;
- (c) practical questions arising out of the subjects previously studied, and other questions not strictly actuarial but of which a knowledge is required by the actuary in the practice of his profession.

Accordingly, Part I was made simply mathematical, no mention being made of arithmetic: the subject 'Elements of Statistics' came in, but that of 'Compound Interest and Annuities-Certain' went back to Part II.

Part II was divided into two Sections, A and B. The former comprised Compound Interest, etc., the latter covered Life Contingencies and other Contingencies within the scope of actuarial work. These 'other Contingencies' represented a widening of range. On the other hand, the 1908 experiment was not continued of including Classification of Policies, Book-keeping and Financial matters.

Part III, also in two Sections, was confined now, in Section A, to the compilation and graduation of various types of Tables and to the history etc. of the chief Mortality and Sickness Tables in general use: Section B covered comprehensively both the calculation of rates of premium and contribution and the valuation of contracts. Thus, no specific reference was made now (as it had been made in 1908) to

extra premiums for lives subject to special hazard, and 'Distribution of Surplus' was transferred to Part IV.

Part IV in the new Syllabus laid a very much reduced emphasis on Law and on Finance. Both subjects were still mentioned, but merely with reference, respectively, to the Acts governing Life Assurance and other more or less analogous Institutions and to the investment of their funds: the Syllabus of 1908 included the Elements of the Law of Contract and of Real and Personal Property and the Elements of Banking, Finance, Foreign Exchanges and the Money Markets of the World. The transfer, in the new Syllabus, from Part IV to Part III B of the calculation of rates of contribution for and the valuation of Friendly Societies, Pension Funds and Widows' and Orphans' Funds meant, undoubtedly, a more logical ordering.

Taken as a whole, the new Syllabus was definitely more 'specialist' in its content and so lacked the broader basis of its immediate full predecessor.

May was substituted for April as the month in which the Examinations would be held.

A further important change lay in the provision that, to become an Associate, a candidate must have passed Parts I, II and III of the new Syllabus—the general principle being that these Parts dealt with knowledge to be acquired, while Part IV involved the professional judgement to be exercised in practice.

It was decided that Fellows, by examination, of the Faculty of Actuaries, on being admitted as Associates of the Institute, should be deemed to have passed Parts I, II and III.

Soon after the introduction of the Syllabus, the Council made the following direction:

Candidates will be expected to satisfy the Examiners on each subject included in the Syllabus.

In May 1922, arrangements were well advanced for the issue of two new text-books, curiously described in the Minutes as 'the new Edition of Part II of the Text Book in two volumes'. The works, published in the autumn of 1922, were *Calculus and Probability for Actuarial Students*, by A. Henry—primarily a Part I text-book—and *Life Contingencies*, by E. F. Spurgeon, in replacement of G. King's famous book.

The Revised Syllabus of 1928

The Council did not give any encouragement at this time to a project for a treatise on 'Finite Differences'.

The need for positive assistance, particularly in preparation for the later Examinations, was making itself felt more and more. In 1925, the Examination Committee was ordered 'to consider the question of Correspondence Courses, with power to act, and to consider further as to the arrangements for the Classes in Parts III and IV'. Soon afterwards, the Students' Society raised the subject of 'consolidation of reading for the assistance and guidance of candidates for the final examinations'.

The General Strike of 1926 caused some difficulty, but emergency measures were taken and no serious trouble occurred.

In 1927, a small Actuarial Library was established in Manchester for the use of local members and it was hoped that similar facilities would become available in other provincial centres.

A panel of Tutors was set up in 1927 for the Parts III and IV classes, but no official tuition by correspondence was yet arranged.

In 1928, the Syllabus was revised again, mainly in the way of redistribution of subjects. The Elements of Statistics were removed from Part I. Statistical Methods and Official Statistics came from Part IV into Part III A, which was developed, *inter alia*, by specifying the compilation, analysis, interpretation and practical applications of Tables instead of merely the compilation. The subject of Acts of Parliament was brought from Part IV to Part III B. The Valuation of and the Calculation of rates of contribution for Pension and other similar Funds were transferred from Part III B to Part IV, which was now divided into Sections A and B.

The exemption allowed to Fellows, by examination, of the Faculty of Actuaries was limited to Parts I and II.

A request for consolidated reading was met, with caution, by the issue of some comparatively short treatises, each dealing with a particular aspect of the work for the later Parts of the Examinations. There was a strong feeling that advanced students should still read the original papers and the discussions, and not confine themselves to merely summarized or predigested exposition.

It was agreed in 1930 to give credit in Algebra and Logarithms to Part I candidates who reached a good pass standard in those subjects and, though failing to pass the Examination as a whole, displayed

reasonable proficiency in the remaining subjects. Also, it was decided to make Sections A and B of Part II independent, so that a candidate could take either or both at any Examination without jeopardy. A similar provision was in force already as regards Parts III and IV.

Early in 1931, *An Elementary Treatise on Actuarial Mathematics*, by H. Freeman, was published in replacement of Henry's work. In the same year, a substantially revised edition was produced of Todhunter's text-book on Compound Interest. Freeman's work was supplemented in 1936 by his book of additional examples in Calculus, Finite Differences and Probability.

The Institute showed, in 1932, its increasing sense of community with the sister Societies in North America by extending to their Fellows, by examination, the right, on being admitted to membership of the Institute, of exemption from Parts I and II.

The work of the Board of Examiners made such demands upon its members, for the earlier Parts, that, in May 1932, the Council authorized the appointment of additional Assistant Examiners.

The Council approved in October 1932 a recommendation from the Examination Committee that 'a graduate in Statistics of a British University, who is able to satisfy the Council that his knowledge of the work is sufficient to enable him to sit for Part I successfully without further preparation, be permitted to take Part I and the whole of Part II in the same year'.

In October 1935,

The suggestion that the general question of the Syllabus, the preparation for and the conduct of Examinations be reviewed, was adopted, and the matter was remitted to the Examination Committee with instructions to form a suitable Sub-Committee (with power to co-opt thereon members of the Council if thought desirable) to enquire, take evidence and report. It was agreed that the terms of reference for the Sub-Committee should be as wide as possible so that all points relevant to the enquiry might be discussed.

This short decision heralded an investigation that, by the standards of the time, should be described as exhaustive. The result of this work was considered by the Council at two Special Meetings in April and May 1936 and the revised scheme suggested was approved, with comparatively minor amendments. In June, the Council ordered

The Revised Plan of 1936

that the following announcement should be made in the next issue of the *Year Book*:

The Council has decided to make certain changes in the Tutorial and Examination arrangements, which will come into operation as from the commencement of the Session 1937-38. The facilities for Official Tuition will be extended, the Syllabus will be replanned (without appreciably altering its total content), and the Examination arrangements will be modified, chiefly by giving the candidate a wider option as to the order in which the later subjects may be taken and by reducing the length of the papers. It is hoped that the new Regulations, Syllabus and Course of Reading will be published in May 1937 and that the details of the Classes will be available a little later.

It is believed that no better form can be found for a succinct account of what the new Scheme involved than the words of Henry Brown in his Presidential Address of 26 October 1936. There is a double fitness in using them for the present purpose—they give the essence and they were spoken by a man whose kind, critical, wise and authoritative influence was a determining factor in the acceptance of the plan. He said (*J.I.A.* LXVIII, 217):

It has been decided to maintain, quite unimpaired, the standard of qualification required for the Fellowship of the Institute. The object of the changes is to encourage the entry into the profession of young men of good education who will have a reasonable chance of qualifying, and to secure some alleviation of the heavy and long-continued effort which has been necessary to pass the examinations.

So far as new entrants are concerned the class of Probationers will be abolished, and no new Probationers will be admitted after 31st May 1937.

New entrants will be required to produce evidence of educational fitness, according to a standard which will be indicated in the *Year Book*.

After May 1937 there will be a Preliminary Examination in Algebra, Elementary Differential and Integral Calculus, and English Essay and Précis. The Institute will give no tuition for this examination. The necessary standard in the subjects of the Preliminary Examination can best be acquired at school, and for those who have not quite reached the standard before leaving school there are facilities outside the Institute. The Council consider that the Institute tutors should be free to devote their energies to the more technical subjects included in our examinations.

The Syllabus of the Examinations is being re-planned. The general basis of the new scheme is that Part I will include Probability, Finite Differences,

Elementary Statistics and Compound Interest; Part II will deal with the Theory of Life Contingencies; Part III with Mortality, Sickness and other similar statistics and tables; Part IV with Life Office work—Premiums, Valuations and Distribution of Surplus; Part V with Friendly Societies and Pension Funds; Part VI with Investments, Reversions and Social Insurance.

There will be considerable freedom of choice as to the order in which Parts IV, V and VI may be taken. There is at present, and there will continue to be, a definite advance in the character of the examinations at the end of the new Part III (the present Part III, Section A). Up to that point the examinations deal almost entirely with theory; but from that point they deal mainly with the application of theory to practice, and the candidate is required to show judgement as well as technical skill. The Council consider that at this stage a candidate should be free, and would be well advised, to take next that Part which is associated with his own daily work.

Full details of the new Syllabus and Regulations (including the transitional arrangements for the existing Probationers and for those who have passed some, but not all, of the examinations) will be available in May 1937. As far as is practicable, the transitional arrangements will for a certain period give full credit to all students for the subjects in which they have passed in the examinations up to 1937 inclusive. The Preliminary Examination will be held half-yearly in January and July, beginning in January 1938. The other examinations will be held yearly in May as at present, and the new Syllabus will apply to the examinations of May 1938.

I come now to what is perhaps more important—the development of the Institute's system of tuition. As I have said, the Council do not propose to give tuition in future in the purely academic subjects of the Preliminary Examination. In all the other subjects of the examinations the Council intend to give improved and extended tuition.

The Institute has been holding oral classes for all parts of the examinations since 1925, and the Council consider that this is the best method of tuition for those who are able to take advantage of it. The number of students attending the oral classes has grown to such an extent that it has already become necessary to hold some classes in duplicate. Additional tutors will be appointed, and the duplication extended, where necessary, the intention of the Council being to restrict the size of the classes so that every student attending them may have adequate facilities.

For the present, however, it is only in London that the Institute can maintain oral classes, and we have a large number of students in other cities in Great Britain and overseas. The Council consider it advisable that the Institute should maintain official correspondence courses in all Parts

Foundation of the Actuarial Tuition Service

(excluding the Preliminary Examination), and is making arrangements for the absorption of the Marples correspondence courses into the tuition system of the Institute. Mr W. F. Marples will enter the service of the Institute in May next as the Secretary of a new Tuition Committee which is being set up by the Council, and I trust that the success which attended his father's work and which has attended his own work in an unofficial capacity, will be continued and extended still further when he becomes an Officer of the Institute.

The oral and correspondence tuition will be co-ordinated, and it will be the constant aim of the Tuition Committee to give as much assistance as possible to all Members of the Institute who are working for the examinations.

It is intended that all the reading recommended for the examinations should be readily available, and the Council are co-operating with the Committee of the Students' Society for the issue of further booklets in the Consolidation of Reading series, and the development, where advisable, of those already issued.

Prospectuses of the revised facilities for tuition will be available in May 1937. The fees for tuition and examination will be fixed so as to secure, as far as possible, a balance between income and outgo, as it is not intended that the Institute should make a profit from these services.

In working out these new arrangements we have kept in touch with the Faculty of Actuaries in Scotland, and we are in close co-operation with them in respect of those matters which are of common interest to both bodies, especially the arrangements for correspondence tuition.

The minimum age for attainment of the Fellowship of the Institute was raised from 21 to 23.

An Entrants Committee was set up to deal with applications for permission to sit for the Preliminary Examination and with requests from certain University graduates for exemption therefrom. This Committee was merged later in the Examination Committee.

Professional Examiners were to be employed for the Preliminary Examination. Associateship of the Institute became conditional on passing all Examinations up to Part III inclusive and either Part IV or V. Fellows, by examination, of the Faculty of Actuaries, or of the Actuarial Society of America, or of the American Institute of Actuaries, on admission to membership of the Institute, were to be regarded as having passed all Examinations up to and including Part III.

The Actuarial Tuition Service (soon to become affectionately known as the A.T.S., before the War Office introduced an unfortunate conflict of meaning in these initials) was founded as the joint undertaking of the Institute and the Faculty of Actuaries. From the first, the control, under authority delegated by the two Councils, was vested in a Joint Committee of which the two sections met in London and in Edinburgh, with combined assembly as occasion required.

With the abundant energy and experience of the first Secretary, W. F. Marples, and the goodwill of all concerned, a full service of revised and co-ordinated Oral and Correspondence Tuition was provided speedily for the Examinations of the two Bodies in London and Edinburgh. The needs were met too, as far as possible, of Students in other centres, at home and abroad. A band of Joint Honorary Official Overseas Representatives was appointed to advise aspirants locally.

An arrangement was made whereby the receipts from and expenditure on Tuition and Examinations for the Institute and the Faculty were pooled in one account.

Premises were found for the Actuarial Tuition Service in 5/6, Staple Inn and the advantage very soon became apparent of having there a whole-time Officer who, himself a qualified actuary, was able to devote his experience to the task of giving general advice to Students and of overseeing the work of tuition.

In the *Year Book* for 1937-8, the panel of appointed Tutors was set forth—it showed more than seventy names, most happily drawn from the membership of both the constituent Bodies.

The demand on the younger qualified members of the Institute and the Faculty for work as Tutors, added to the heavy call for the Boards of Examiners, meant a serious, though an obviously proper, application of the total available spare-time energy and, in recent years, steps have had to be taken to see that, as need arises, men are ready for the task. The introduction of half-yearly Examinations since the close of the War of 1939-45 has brought this problem into still sharper relief.

As regards tuition, there is no doubt that the new Scheme marked a great advance and that it has justified the high hope held when it was introduced. Very much of this success has been due to the

wonderful co-operation between the two sections of the Joint Tuition Committee and mention must be made here of the outstanding service and helpfulness of Charles M. Douglas, first Chairman of the Edinburgh Committee. Those who, like George Green in London, worked with him for so long and so happily, know something of the obligation under which he placed the Actuarial Tuition Service.

On the Examination side, it is not possible to offer any worthwhile verdict—nor, perhaps, is it the business of this history to attempt one: the new Syllabus was not in operation for a period sufficient to show its virtues and defects. The War of 1939-45 broke up the picture, as, similarly, had the earlier struggle. From the purely professional aspect, it is a part of the tragedy of the last 35 years that two major efforts of the Institute in the educational field were prevented from showing their full result. But some fruit remained.

In the short interval between the establishment of the new System and the coming of the War of 1939-45, a few matters arose that are significant for mention here. Freeman's Part I text-book was issued in 1939 in a revised form—'Mathematics for Actuarial Students': Vol. I, *Trigonometry and Elementary Calculus*, and Vol. II, *Finite Differences, Probability and Elementary Statistics*. A new departure, long advocated by some, was the authorization in June 1939 of an official text-book for the Part III Examinations. It was decided that the work should be a joint product of the Institute and the Faculty of Actuaries and that two volumes should be written. The war caused heavy delay in the matter, but the first part ('Actuarial Statistics', Vol. I, *Statistics and Graduation*, by H. Tetley) has been published.

The war cast its first unmistakable shadow over the Institute when, early in 1939, the Council had to consider the position of members in relation to the National Service Register. It was decided to advise those to maintain their study who were called up for the Militia and a circular was issued on 31 August, all effect being lost by the outbreak of the war 3 days later.

The Actuarial Tuition Service remained in operation for teaching by correspondence, but its work diminished to very small proportions. Examinations were conducted until 1942 inclusive, the balance of opinion being in favour of encouraging such students to qualify as might be able to do so. Nevertheless, there was ample

recognition of the relative and absolute disability imposed in this respect by the war on many members and it was decided to give all possible help to them when at length they should take up the work again.

Examination answers in transit from overseas centres were delayed and, in some cases, lost at sea. Emergency measures had to be taken to meet the trouble, and micro-photography was considered as a precaution: it was deemed to be generally impracticable on the ground of cost. But the Actuarial Society of Australasia offered to undertake this work for local papers, without expense to the Institute, and the kindly gesture was accepted. Some Examination question-papers did not arrive overseas in time and the actual sittings had to be held on dates later than those originally fixed.

The 1941 Examinations in London were held in an air-raid shelter at the offices of the Prudential Assurance Company.

The staff of the Actuarial Tuition Service was accommodated in the offices of the 'Prudential' as a precaution during the period of heavy air-raids.

By April 1943, the general outline was taking shape of the concessions to be made after the war to meet the needs of members whose studies had been interrupted. The Council had resolved, in May 1940, that some such steps should be taken and it decided now, in principle, that half-yearly Examinations should be held for a transitional period and that credits for portions of the Syllabus, particularly in Parts IV, V and VI, should be considered.

Representatives of the Institute were appointed in June 1944 to meet those of the Faculty of Actuaries for the consideration of post-war Examination arrangements.

The Cambridge Joint Advisory Committee for Mathematics approached the Institute, at the end of 1944, for comment on suggested draft syllabuses for two-years courses of sixth-form school work in Mathematics, including Elementary Statistics. The opportunity was taken of discussion, so that (a) any practicable exemptions from the earlier Examinations of the Institute might be arranged for boys who had secured certificates at appropriate Examinations under the auspices of the University, and (b) the attraction of an actuarial career might be brought before the schools concerned and their more suitable pupils.

The Revised Syllabus of 1946

Vocational training of students awaiting release from the Services and the encouragement of suitable young people to enter the profession also received consideration. Advice was given regarding a booklet on Actuarial Work published by the Government in a series dealing with various occupations.

The Examinations of the Institute were resumed in May 1945, special arrangements being made for candidates in the Services.

Daytime study was inaugurated on 1 October 1945, in co-operation with the Faculty of Actuaries and the Chartered Insurance Institute and by the agreement of the employers concerned.

Numerous enrolments for Actuarial Tuition Service Courses were made under the Army Educational Scheme.

In May 1946, the standard of the Examinations in the immediately post-war period was approved by the Council and the allowance of credits in Parts V and VI was extended. A project was agreed also for a post-graduate course of lectures in Advanced Statistics: this course was arranged to be given by Prof. E. S. Pearson of University College, London, and received a most gratifying response. And to meet the needs of students, booklets on *Multiple Decrement Tables* and *Surrender and Paid-up Policy Values* were issued a little later.

But incomparably the greatest problem was that of the future of the educational work in the period when the purely transitional post-war years should have passed. In 1944, a Sub-Committee was set up by the Examination Committee; the Report was considered by the Council in May 1946 and approved, subject to some points to which the Council wished the Examination Committee to give further consideration.

What is to be said of this shape of things to come—for it is that—as the account of the educational work of the Institute for nearly 100 years draws to an end? Nothing complete or even adequate is possible here and, still more, now—yet something must be added. The President of the Institute devoted much of his Address on 28 October 1946 (*J.I.A.* LXXIII, 1) to an exposition of the reasons for the new Scheme, the Scheme itself and the hopes that were held in respect of it. His words represent the best account that has been given, but, necessarily, it is too long for reproduction and no mere summary would do justice to it, or to the subject. So it is proposed to give the short preliminary statement made at the Annual General

Meeting of June 1946 and, from the President's Address, his setting-forth of the proposed Syllabus:

The Leading Ideas in the Scheme

1. Progressive approach in Parts I-III to the main subjects—Mathematics, Statistics and Finance. This approach meant that a student would follow a subject through those Parts instead of taking it once, as it were, in isolation.

2. More systematic treatment in the Parts of the subject of Statistics, the introduction of a more formal economic background to the study of Finance and increased attention to Demography.

3. The Associateship to be gained by passing the Preliminary Examination and Parts I-III.

4. Specialized emphasis in Part IV. This Part would consist of a general examination in all the main subjects, which were (i) Life Assurance, and (ii) Friendly Societies and Pension Funds and Social Insurance, with a fuller test, either in one of those two subjects, or in More Advanced Statistics.

5. Elimination of unnecessary detail in the treatment of the various subjects.

6. Full provision of Text Books etc., for the whole range of the examinations, except the more advanced section of Part IV. This would involve not only the writing of several new books, but also the revision of most, and probably all, of the others.

7. A longer time-allowance for answering the Examination papers, which would be designed to give candidates every reasonable chance of showing their fitness.

8. An extended system of credits for those who did well in some subjects but failed to satisfy the Examiners in the whole range.

9. Exemptions from certain Parts or subjects of the Examinations for holders of some Certificates or University Degrees. The possibility was being explored and developed of granting Associateship to University Graduates on their passing Institute Examinations in such papers as they had not covered in their University course. This idea involved complicated planning and negotiation, but there was a strong hope of making a definite start on those lines.

If possible, Examinations would continue to be held half-yearly. There was one overriding consideration that had been in the forefront throughout the deliberations, namely, the imperative need for shortening the average time taken by a reasonably equipped candidate to pass the Ex-

The Framework of the 1946 Syllabus

aminations. It was believed that the new scheme would achieve that result and that it would produce even better and broader actuaries than at present. It was hoped also that daytime study would prove so valuable to the students, and through them to their employers, that the latter would welcome its being continued indefinitely.

Other questions had been and were being considered, such as the best method of finding out as early as possible, and in the joint interests of the Candidate and the Institute, whether an aspirant was suitable for the necessarily exacting course.

The Broad Framework of the proposed Syllabus

The revised Syllabus, designed to assist in attaining these important aims, must clearly occupy a central position in any comment upon the Sub-Committee's work, and attention is next directed to the broad framework of the Syllabus, as a whole, in order that the interlocking functions of the component parts may be seen in proper perspective. The proposal is that the examinations after the 'Preliminary' should be divided into the following Parts, each Part being sub-divided into sections as indicated.

Examinations for the Associateship

Part	Mathematical Group	Statistical Group	Financial Group
I.	Section A Finite Differences Probability	Section B Statistics	Section C Compound Interest and Introduction to Finance
II.	Section A Life and Other Contingencies	Section B Statistics Mortality and Other Investi- gations	Section C Compound Interest Finance and Invest- ment
III.	Section A Life and Other Contingencies	Section B Mortality and Other Investi- gations Demography	Section C Finance and Invest- ment Life Interests and Reversions

(Success in all three Parts will secure the status of A.I.A.)

Examinations for the Fellowship

- IV. Section A (Less advanced treatment)
 - Life Offices—Ordinary and Industrial.
- Section B (Less advanced treatment)
 - Friendly Societies, Pension Funds and Social Insurance Schemes.
- Section C (Specialized emphasis)
 - 1. Advanced treatment of Syllabus for Section A.
 - or 2. Advanced treatment of Syllabus for Section B.
 - or 3. More Advanced Statistics.

(Success in the three Sections of Part IV will secure the status of F.I.A.)

The work of preparation for the new Scheme is going forward actively and the immense task of supervising the writing of a virtually complete series of fresh text-books is in the hands of a Co-ordinating Committee of the Institute and the Faculty of Actuaries.

In 1947, steps were taken successfully to obtain for Actuarial Students some measure of deferment of National Service, so that there might be a minimum of interference with their professional training.

Looking back over the whole term of the Institute's educational effort from 1848 until the present time, one sees, it is suggested, a steady adherence to the aim of securing that those who received the hallmark of the Fellowship should be fit to do the professional duty that would lie to their hand. Over and over again, as these pages show to some extent, it has been lamented that a large proportion of the aspirants failed to satisfy the Examiners. The remedy has been sought continuously—sometimes almost with tears—but never in the direction of letting the standard fall beneath that which was felt to be owed in honour to the Institute itself and to the community that it existed to serve. Mistakes, undue anxiety, even unnecessary stringency of requirement—perhaps some or all of these—but with the charge committed to it, the Institute has tried unswervingly to keep faith, even though many students have found it impossible to finish their course.

THE INSTITUTE OF ACTUARIES STUDENTS' SOCIETY

It is not intended here to attempt to give even the briefest outline of the history of the Students' Society. The time may come when that task will be performed, but it does not lie within the scope of the present book. Yet, to make no specific mention would be to omit due record of an influence that has contributed much to the life of the Institute since the year 1910. The Society was founded to assist junior members of the Institute in preparing for the Examinations, to increase their professional knowledge and to give them practice and confidence in public speaking. The attainment of any or all of these objects would involve, of course, a corresponding benefit to the Institute, and the years have shown that the results intended have been obtained. Governed by its own Committee, the Society preserves liaison with and receives any needed guidance from the parent Body through the service on the Committee of a member of the Council of the Institute specially appointed each year. Very keen interest has been shown by the Society in educational work; for example, by discussions at its own meetings, by the scheme of 'Consolidation of Reading' booklets, by the preparation of 'Volumes of Reprints' and by the issue of a Journal. The Society has conducted its own exhaustive investigation into the subject of the Future of the Profession and the Report was made available to the Sub-Committee charged with the recent review of the educational policy of the Institute. The Sub-Committee was encouraged by finding a substantial measure of agreement between its own preliminary conclusions and those contained in the Students' Society's Report.

Still further developments that should react favourably on the educational work of the Institute are the inauguration by the Society of enthusiastic Study Groups in the subjects of Statistics and Economics.

Mention must be made also of the help afforded by the presentation to the Library of the Institute of books required by those preparing for the Examinations, and by the co-operation of the Society in establishing a Reading-room and a Reference Library at 5/6 Staple Inn.

The Council has marked its appreciation of the work and influence of the Society in various ways, notably by co-opting representatives to serve on Committees of the Council for the consideration of matters of special interest and importance to the junior members.

CHAPTER VIII

OTHER ACTIVITIES

THE JOURNAL

In October 1849, a notice of motion was given to the Council in the following terms:

1. That it is desirable to publish a Journal of the Institute of Actuaries to appear once a quarter at the expense of the Institute.
2. That the first number shall appear in the month of March next.
3. That Messrs [left blank] be appointed a Committee of Editorship to superintend the publication of the Journal and to examine the Papers forwarded to appear in it.
4. That the Council do hereby agree severally to prepare a Paper for publication.

There is no record of a specific decision: perhaps the fourth item caused embarrassment, though there were giants in those days. A year later, 'consideration of the publication by the Institute of the Assurance Magazine was deferred': it had been founded privately, the first number being published by Charles Jellicoe and Samuel Brown in September 1850. The second issue appeared in January 1851, with pages beginning from 1; consequently, references to Vol. 1 have to make clear whether the first or the second number is being cited. A further point, for those interested in possessing a complete set, is the need of ensuring that the first volume does contain all its parts.

Official relations with the new magazine began when, in December 1850, it was agreed 'that the Papers read at the meetings of the Institute, and ordered to be printed, be forthwith printed and forwarded to the members of the Institute—the publishers of the *Assurance Magazine* being at liberty afterwards to use the setting up': also 'that the *Assurance Magazine* have liberty to publish the proceedings of the Institute as furnished by the Secretaries'.

Arrangements with the Assurance Magazine

A curious single reference, in February 1851, related, presumably, to the printing of the papers—‘Resolved that the Transactions of the Institute be in future printed by Mr Parker of the Strand’. In the following December, a report was produced by ‘the Committee appointed to consider whether any arrangement can be made to print the Papers read before the Institute in the *Assurance Magazine*, the members being supplied with copies’. The following extracts from the report, which was ‘to be considered later’, are given:

It appears that on an average, six Papers are printed annually by the Institute, the cost of which, including the delivery of them to the Members, is as nearly as possible £42.

At present these Papers appear also, without further cost, in the *Assurance Magazine*.

If the Institute will forgo the separate publication of them, the publisher of the *Assurance Magazine* will undertake to insert such Papers as the Council may order, on an average charge of three guineas each, at which rate the expense incurred annually by the Institute, on this score, will be reduced to eighteen guineas and a reduction effected of nearly £23.

It is possible that a more economical arrangement might be made with other parties, but considering that one of the principal objects which the Institute has in view is the bringing more prominently before the Public the powers and qualifications of the profession, and considering that this is done more effectually by the publication in question, than by one of a more diversified character, and that therefore it becomes the interest of the Institute to give the Magazine (conducted as it is at considerable expense) such support as it properly can, your Committee bearing in mind the importance of the saving, and the trifling inconvenience arising to the Members from the suppression of the separate publication (inasmuch as they will have abundant opportunities of reading the Magazine gratuitously) respectfully recommend that the terms of the publisher of the *Assurance Magazine* be complied with.

The Council came to its decision, in June 1852, when it was

RESOLVED: That at the termination of the present Session the publication of the Papers of the Institute be discontinued and that a Periodical, to appear at regular intervals, be substituted, to be called ‘The Assurance Magazine and Journal of the Institute of Actuaries’; the numbers to be of the same size, and the contents of the same character as those of the *Assurance Magazine*.

That the *Journal* be placed under the sole management of one of the Members, or ex-Members of the Council, and that he have full control over it during their pleasure.

That Mr Jellicoe be requested to undertake the same.

Within a few months, a Mr Tompkins complained of 'certain strictures by the Editor on a Paper of his [Mr Tompkins] published in No. 9 of the Institute Journal' (*J.I.A.* III, 15).

An idea of the cost of an early number is shown by the following bills:

October <i>Journal</i> 1852	£30. 2s.
January „ 1853	£14. 16s.

These bills are stated to be 'less discount'.

The already comparative scarcity of Vol. I and II was shown, in 1855, by the order that back numbers of the *Journal* sold to members at 1s. 6d. per Part should not include those of the first two volumes.

In February 1866, the name was to be altered to *Journal of the Institute of Actuaries*, but the title-page of Vol. XIII, dated 1867, is in the old form. The order was changed, from Vol. XIV inclusive, to *Journal of the Institute of Actuaries and Assurance Magazine*. The last three words did not appear in any title-page after that of Vol. XXIV. Charles Jellicoe, the first editor, had resigned, in 1867, from this Office and from the Presidency. The Council recorded its most hearty thanks to him 'for his laborious and successful editorship of the *Journal* during the seventeen years it has been in existence'. After his death, it was said, in the *Annual Report* for 1882-83, that the *Assurance Magazine*, now the *Journal*, 'was almost entirely his own creation, the early numbers having been published at his risk and expense, and his name, therefore, will ever be associated with that work, and held in honour and respect'.

The new editor, T. B. Sprague, was granted the use of the rooms of the Institute 'for the purpose of holding meetings with members of the Institute and contributors to its *Journal*'.

A token of the respect in which the *Journal* was held abroad came in 1870, when the Council had great pleasure in granting permission for translations of articles appearing in the *Journal* to be given in a foreign publication.

A general financial report from the Hon. Secretaries, in 1871, stated that the average annual cost of the *Journal* recently had been

£119. 7s. 10d., 'say £120' and 'we have reason to think that little diminution of this average of expense should be anticipated'. However, it seemed likely that the Institute might look forward to a 'surplus income of £60 per annum, which might safely be made available for additional assistance to the Editor of the *Journal*, and for the suggested payment to a Tutor or Lecturer'.

It was decided in March 1873 to advertise each number in *The Times*, *Athenaeum*, *Economist* and *Insurance Record*.

Meanwhile, T. B. Sprague was pursuing his masterful and individualistic way, apparently without any reference to the Council. In January 1874:

The attention of the Council having been called to various instances of departure, in the last No. of the *Journal*, from received modes of spelling RESOLVED that a communication be made to the Editor of the *Journal* that it is the wish of the Council that the *Journal* be spelt throughout in the ordinary way.

At the next meeting of the Council, the ensuing correspondence was read and it was moved and seconded:

That although the Council adhere to their wish that the usual style of spelling should be adopted in the *Journal* of the Institute, considering that orthography does not form any branch of Actuarial Science they are nevertheless willing from the sense which they entertain of the service rendered by Mr Sprague to concede to him that he should use in his own original contributions any system of spelling which he may desire to advocate—It being understood that translations and editorial notes are not to be expressed therein.

Some members were not willing thus to give way, even to Sprague, and an amendment was proposed and seconded thus:

That the Council having carefully considered Mr Sprague's letter of the 28th of January and having given due weight to all the representations urged in the said letter regret that they are compelled by a paramount sense of duty to the Institute to adhere to their previous Resolution of the 13th January.

The amendment was lost by 8 votes to 5 and the original motion was then carried by 9 votes to 5. Sprague signified appreciation of the Council's having met his wishes and promised to bear in mind its desire (expressed by the Hon. Secretaries) 'that an editorial note

be appended to each of my contributions in which a special mode of spelling is adopted'. He added that the concession made was 'quite sufficient to enable me, without a feeling of humiliation, to give as hitherto my best services towards keeping up the interest and standard of the *Journal*'. He desired, because of his engagements and his residence in Scotland, to have a Joint Editor or a 'Journal Committee'. He wanted a colleague, or colleagues, 'who would undertake to share the labor and responsibility of bringing out the *Journal* and whose especial duty it would be to see that the details of the work are arranged in a manner agreeable to the Council and that such novelties as "erratums" are not introduced, while generally distasteful to the governing body'.

There was no urgent desire for the post and, after one deferment, the duty was cast upon the Hon. Secretaries of being 'responsible for the typographical arrangements of the *Journal*'.

Any who may wish to make or renew acquaintance with the spelling adopted by Sprague, or to know his arguments in its favour, should read his short 'article' (*J.I.A.* xviii, 88) which contains the following sentence:

Inasmuch, however, as anything like a full discussion of orthographical principles would be quite out of place in a publication like this *Jurnl*, I will be very brief.

The paper to which this note was appended bore the Council's disclaimer:

The Author of this Paper is alone responsible for the spelling adopted therein.

The phase passed: some of Sprague's later contributions are normal.

W. Sutton dared in March 1878 to ask 'whether steps should not be taken to render the *Journal* a more complete record of the transactions of the Institute than it is at present' and the Council went as far as to resolve that it was desirable to secure what Sutton advocated 'in the points specified' in his letter. A Committee appointed to consider the matter made a number of quite ordinary suggestions, which should not have been needed at all.

In February 1879, the subject of free, or exchanged, copies of the *Journal* was discussed. Charles Jellicoe was to have eight copies of each number and among other actual or potential recipients were the

The Beginning of 'Legal Notes'

Nottingham Free Library (one copy) and 'any other Free Library that expresses a wish to receive a copy'.

The question of reprinting Vols. I and II arose in 1880, but the project was dropped, and nothing came of a request in 1888 for the 'republication of early volumes'. A similar fate befell a suggestion, in 1890, to reproduce by stereotype three comparatively recent Parts that were out of print.

Sprague resigned at the end of 1882 and was given a well-deserved vote of thanks. After an interval, during which the Hon. Secretaries had to act, R. P. Hardy was appointed editor, but he did not last for long, and there appears to have been much trouble over delay in the production of the *Journal*. He was equally slow, however, in cashing cheques paid to him by the Council and, in March 1885, three (each for £25) were returned by him and cancelled. Hardy resigned, on account of ill health, in the middle of 1885 and the Hon. Secretaries were responsible, with assistance, for some 8 years. H. J. Rothery was promoted from the sub-editorship in 1893, but he died in the same year and G. H. Ryan succeeded him.

By December 1888, the number of copies to be printed had risen to 1,000. In 1894, the order became 1,250 copies, and 1,500 copies in 1898. Later, the supply was increased to 2,000 copies.

As soon as the stock of any back number fell to 25 copies, no further sale was to be made unless the Hon. Secretaries agreed.

George King was appointed editor in 1896 with two sub-editors, all three to be mentioned as officials of the Institute in its lists.

The length of some of the papers caused the Council from time to time to issue double numbers.

In 1902, the list of Fellows became 'too long to be printed inside the cover of the *Journal*'.

The familiar passage, appearing in each number of the *Journal*, as to the Council's not being responsible for opinions put forward in papers and discussions, reached its present form in 1904.

T. G. Ackland took G. King's place as editor in 1905. The retiring editor, whose explanation of the cost of the *Journal* had been deemed 'satisfactory for the present', was given 'renewed thanks' for 'his able conduct of the *Journal* during the past eight years'.

A development of permanent value came in 1907, when the editor suggested and was given legal assistance. Thus began the references

to Law Cases of interest to the profession. This department of the *Journal* has been in the hands of properly qualified contributors and continues to prove of much value to readers.

The extreme scarcity of copies of Vol. I prevented members, who wished to do so, from collecting complete sets, and, in 1912, the Council agreed to the making of a reproduction in the United States. In the following year, Messrs C. and E. Layton, of London, were authorized to issue an edition prepared by a photographic process, the copies being marked to indicate that they were not original prints. Possibly, the two references relate to the same project: the 'Layton' reissue was made.

The regular production of new Parts was interrupted by the two world wars, which have left their marks on the *Journal* not only thus, but also in increased price. The recent war has led to the use of an unfortunate difference of type and a poorer quality of paper.

It was reported in March 1928 that the Library contained ten sets of the *Journal*, with '2 complete and 7 partially complete unbound sets in reserve and some surplus Parts withdrawn from sale'. The Council agreed that the unbound sets and surplus Parts should be made available for sale to members and Libraries.

In 1931, and in 1936, it was found necessary, for maintenance of stock, to reproduce by photography certain quite recent Parts for which an unusually large demand had occurred. An Hon. Auditor once questioned the strict accuracy of the record of the total number (several thousands) of Parts of the *Journal* held in stock, and was advised, on the instructions of the Senior Hon. Secretary, to count them.

Inquiry was ordered, in May 1947, to be made among the English Universities with Departments in Statistics or Demography 'whether presentation copies of the Institute's *Journal* for their Libraries would be appreciated and useful'. Subject to favourable response, it was agreed 'to present back numbers covering a period of 10-15 years, in addition to future issues'.

So important and long-continued a publication as the *Journal* requires, for full usefulness, a cumulative Index. Throughout its history, the problem has been kept well in mind and, from time to time, has been solved. The following Indexes have been issued: Vols. I-X, I-XX, XXI-XXX, I-XL, XLI-LV, LVI-LXV.

Curious Items in the Journal

It would seem that the time is approaching, if indeed it has not come already, for the issue of a fresh Combined Index.

A complete Card Index of the *Journal* is maintained at the Offices of the Institute. Had a suggestion been adopted that was made by G. J. Lidstone, in 1925, this Index would have included the *Transactions* of the Faculty of Actuaries.

So much for items of general history, and perhaps of interest, concerning the *Journal*: what of the content of more than 70 volumes? No account can be offered in this book of the many important and professionally epoch-making papers and other communications; some with intriguing names, like 'The Z method', once the last word. Again, it is neither necessary nor desirable to give statistics of the numbers of papers, etc., presented by various outstanding individuals, or in the aggregate. Moreover, no effective purpose would seem to be served by listing the significant subjects with which the *Journal* is filled. All that is attempted is, first, to draw attention to the fact that there is this long record of work and exposition, as also of criticism and history. Secondly, it is desired to make the point that, though much in them may be outmoded, a part elementary and some even inaccurate, the early volumes of the *Journal* are well worth study, for more than merely historical interest. Finally, a thumb may be put into the pie to pull out some plums.

Nothing more needs to be said on the first and second points, except that the *Journal* is a fact, waiting to give its answer to any who will devote himself to the appreciation of what it offers. Such a student may learn something of the men who made the Institute. He will find material, also, for a picture of the work of the Institute year by year (though, from 1929, most of these details were placed in the *Year Book*).

As to the third—a few examples must suffice. In Vol. I, p. 234, the article 'Miscellanea' devoted space to 'essays in political arithmetic' by Sir William Petty and then gave his 'Curious Speculation' on 'the Number of People at the Resurrection', ending with the defiant statement: 'From all which it is plain how madly they were mistaken who did so petulantly vilify what the Holy Scriptures have delivered.'

An article 'On indirect Methods of acquiring Knowledge—The Method of History—The First Table of Mortality', by E. J. Farren,

Esq. (of the 'Asylum' Life Office) began with the assertion: 'The term scholar as current in the English language, has two extreme acceptations, tyro and proficient' (I, 40—the first number).

Vol. II contains a dissertation on the 'Uniform Action of the Human Will' (p. 341). 'Verus', in the same volume, wrote 'on the desirableness of availing ourselves of the best existing data, when such as are perfect cannot be obtained' (p. 294).

'An Exposé of the Fallacy "That it is just to tax Temporary Annuities at the same rate as Perpetual Annuities"', in Vol. III, occupied nearly ten pages.

A book was noticed, in Vol. IV, bearing the title *Life and Marine Assurance: Considerations which should influence Assurers in the Selection of an Office for Life Assurance etc.*, by William Lance, Associate of the Institute of Actuaries, Marine Actuary (p. 271).

In a sketch of the life of Charles Gill, Esq. (VI, 216), there appears a testimonial from 'the Professor of Mathematics to the Royal Military Academy, Woolwich, England, F.R.S., Lond. and Edin., and Auditor of the Gresham Insurance Society, London'. He said:

It is with sincere satisfaction that I depart, in the present case, from my usual rule (one rendered necessary by the position I have the honour to occupy) of not giving indiscriminate or ill deserved testimonials.

T. B. Sprague, in Vol. X, p. 32, had a 12-page letter 'On the recent imputations made as to Mr Gompertz's Accuracy'. In thus defending the first Actuary of the 'Alliance', Sprague took a deadly revenge on the assailant, who, instead of referring to him personally, had used the expression 'the new advocate of Mr Gompertz'. Sprague turned the circumlocution round by describing Edmonds, the attacker, as 'the plagiarist of Mr Gompertz'.

Vol. XI introduced De Morgan's inimitable 'Budget of Paradoxes'; it contained also a long paper 'On the Influence of Railway Travelling on Public Health', stating (with reference to the Underground Railway) 'we know how great a desideratum a good system of ventilation has always been found to be, even when expense is no object, as in the instance of the new Houses of Parliament' (p. 152).

Then, in Vol. XXIII, there is one of C. Walford's discursive papers—'The position of the Insurance Press in relation to Insurance Offices and Insurance Interests'. He tried 'to arrive at a common under-

standing as to the services which the insurance press may render to the Insurance Offices—anything that it may accomplish beyond being so much to the good' (p. 18).

The famous controversy on 'Graduation' by Sprague and Woolhouse (Higham intervening) began in Vol. xxvi and ended its embittered course in Vol. xxix.

D. C. Fraser in Vol. II, p. 77, wrote on Newton's 'Interpolation Formulae', giving a photographic reproduction of the original Latin text, taken from a copy of the first edition in the Institute Library, with a translation for those educated in the modern mode. In Vol. LVIII, p. 53, Fraser recorded his discovery in the University Library at Cambridge of an important Newton manuscript.

And so one might go on, were the purpose any more than to indicate a few of the chiefly light or curious examples to be found among much that is strictly professional and very solid. Mere glancing at the Indexes will impress, upon any who has some little acquaintance with actuarial studies, and some spark of imagination, the tremendous attainment of the leaders of the Institute from the beginning until now. Nothing save sympathetic personal investigation can convey an adequate idea of the responsible and efficient care with which they have worked. Let this, from G. H. Ryan's *Memoir of Woolhouse* (xxxI, 362), stand fully for the best of them and, in due measure, for the others to whom it was not given to be so eminent:

Rare as epic song is the man who is thorough in what he does. And happily so; for he subjugates us, and makes us bondsmen to his ashes.

THE LIBRARY

The formation of a Library was one of the specific objects of the Scheme adopted when the Institute was formed. Even if no mention had been made, or the need overlooked, the importance of a collection of suitable books would have become apparent by force of circumstances in a Body that aimed at the development of professional knowledge and the training of students.

The first reference in the Minutes of the Council to actual acquirement of books is not to purchase, but to receipt of a conditional gift.

In February 1849, E. J. Farren, who has been mentioned in other connexions already in this history, gave some volumes subject to

‘their being returned to him should the Library be at any time dispersed’. Such a proviso was not unique, nor, probably, did it point to any disbelief in the survival of the Institute. It should be taken rather as evidence that a gift, in some sense sacrificial, was made of treasured books for the sake of the Institute and that for which it was trying to stand. There were many other gifts, frequently acknowledged at the early meetings of the Institute. Some of the volumes thus obtained were indispensable and formed the foundation of a worthy collection. But all were not like these; and calm perusal of a list prepared in the early seventies, of works for elimination, leads to the conclusion that some donors had been willing to give what they were afraid to destroy. The list was in three parts and contained e.g.:

Works of General Literature—not Scientific

North American Indians, Portraits of—with Sketches of Scenery.

Canada, a few words on the subject of Pursuit of knowledge under difficulties.

The Introduction to Entomology, or Elements of the National (*sic*) History of Insects.

Anatomy of Drunkenness }
Philosophy of Sleep } by Robert Macnish.
Life of Dalton (1856).

History of Theological Knowledge and Literature.

Hints on Extemporaneous Preaching.

Trials, Criminal.

Prize Essay on the changes since the time of Pinel in the moral management of the Insane.

*Works which, though Scientific, do not specifically relate to the
Actuarial Profession*

Treatise on Rifle Projectiles.

Palladio, Andrea, the Edifices of—a Selection from his most admired Buildings, from drawings taken at Vicenza.

Blue Books and Statistical Volumes of like kind

Surveyor-General of Prisons, First Report on the construction, ventilation and details of Pentonville Prison (and 4 other similar Reports).

In 1850, the Council ordered that a catalogue of books belonging to the Institute should be printed; this must be taken as evidence that,

The Purchase of some Strange Books

already, a considerable collection had been got together. In the same year, it was ordered that £50 (a substantial sum at the time) be laid out in the purchase of books, to be chosen by the Vice-Presidents and the Secretaries. The bookcase was glazed at a cost of £5. The taste of the Hon. Officers was catholic, and their sense of limitation imperfect, for they spent £52. 17s. 7d. on *Europe* (20 vols.), *Encyclopaedia Metropolitana* (30 vols.) and on a miscellaneous assemblage of single or two-volume works, ranging from Cuvier, *Animal Kingdom*; Tredgold, *On the Steam Engine*; through Electricity, Chemistry, Surgery, Medicine and Geography, to Macaulay's *Historical Essays*.

The Committee asked for authority to spend £30 more, but 'this matter was deferred'.

A sum of £17 was voted for bookbinding at the meeting of December 1850, and it was reported that Sir J. W. Lubbock, Bart. had called on Jenkin Jones 'to request that he would present his [presumably the former's] respects to the Council and request their acceptance of a copy of his Paper "On the comparison of various Tables of Annuities", published in the *Cambridge Philosophical Transactions* in 1829'. The paper appeared in 1855 (*J.I.A.* v, 277).

Various donations to the Library by Government Departments were announced in 1851 and it was moved 'that the Council shall subscribe for Parliamentary Papers, Blue Books, etc.' It was decided that because of the expense, £12. 12s. p.a., it was not desirable to do so, but the Secretaries were given authority to buy any 'such papers as might be deemed useful to the members'.

Gifts of books and money continued to be received and some items of historic interest should be mentioned here, thus:

1853: The MSS. of Francis Baily's three works were offered by De Morgan on behalf of Baily's sister 'on condition that if the Institute, by dissolution or otherwise, should abandon the custody of them', they should be returned to her, or, if she were not alive, should be given to the Library of the British Museum.

1857: De Morgan presented letters written to Baily by Barrett 'which marked, as we all know, an epoch in the history of our subject'.

In November 1857, the Council received a letter from the veteran, B. Gompertz, from which the following short extracts are taken:

I consider the Institute of Actuaries a very praiseworthy Institution and one which responds to an observation I made long before I became an

The Institute of Actuaries, 1848-1948

Actuary, in my first tract I wrote on the value of Life Contingencies, published by the Royal Society, namely 'that Actuaries of different Societies should collect for the common good of all that which they could not obtain by a less general observation etc.' . . . It is a pleasure for gentlemen, having the same pursuits, to meet together often, and in my youth I participated in that pleasure, and therefore by experience I approve all Institutions which promote scientific research and, as a good Library is of great service to promote the facility of research, I beg to offer to the Institute the enclosed cheque of ten pounds for the purpose of increasing the Society's Library.

Apparently, this money was not expended until 1860, when the Vice-Presidents and the Hon. Secretaries, under the supervision of the President, were ordered to purchase books.

The Directors of the Eagle Insurance Company, in 1864, gave a set of tables showing the annuity values for three-joint lives 'at certain combinations of ages' by the Northampton Table at a rate of 3%. This donation was subject to the condition of return should the Library be dissolved or dispersed.

The Council resolved in April 1864:

That the interest of not less than £200 Consols be applied for 10 years to the purchase of such Works as the Council of the Institute shall judge to be proper, and that all the books so purchased shall be lettered 'Hardy Memorial' on the exterior and contain a suitable inscription.

Gifts were to be invited from the members, so that the resources of the Institute might be increased sufficiently to meet this charge 'without entrenching on the Funds now in hand'.

In February 1865, the 'Hardy Memorial' Fund was reported as amounting to £150. 2s. 6d. and it was decided that a list be drawn up of books (not in the Library) suitable for purchase.

The Assistant Secretary was instructed, at the end of 1866, 'to report upon the state of the Library and Catalogue'. When he did so, it was resolved 'that a competent person be employed to revise the Catalogue of the Library and superintend the printing of the same'. Mr Nicholson, of Lincoln's Inn Library, was engaged to make a general revision, to check all books and pamphlets, to enter additions, etc. The completion of the task was reported at the Annual General Meeting in June 1868. Evidently the work gave satisfaction,

Preparation of a Printed Catalogue, 1879

for, in 1874, it was decided that Mr Nicholson be asked to repeat the process; no record has been found of his having done so.

A Committee was appointed, late in 1877, to consider the state of the Library. 'Having examined the accommodation for Library purposes at present existing', it recommended that 'a range of open bookshelves be erected in the further small room on the first floor' (the Institute was then in King's College). Permission was sought also, and given, to spend not more than £50 in binding and in the purchase of new books. In its next report, the Committee mentioned that considerable progress had been made, that unbound tracts and periodicals had been examined for retention and binding, and that the Assistant Secretary was preparing a catalogue. In December 1878, a large portion of the manuscript was in the hands of the printer; the Council then ordered that 'an instruction be sent to the Library Committee requesting that Committee to consider and carry out the latter portion of the minute of the Council of April 10th 1864'. The date is wrong: reference was intended, presumably, to the meeting of 12 April 1864 and to the decision to invite subscriptions from members.

The Report of the Council to the Annual General Meeting in June 1879 contained the following paragraph:

A complete list of all the books in the library has been prepared. Some additions have been recently made to the collection, but further purchases will be desirable to make the library more generally useful. When this has been accomplished, the Council contemplate the publication of a printed catalogue for the use of the members.

This may have been the first issue to the members of a Catalogue of the Library.

An interesting purchase was made, in 1880, of a number of pamphlets collected by Cornelius Walford: the cost was £15.

In November 1881, it was ordered:

That a copy of the rules of the Library be suspended in the Library; that one complete set of the *Journal* and one copy of each of the following books viz.: Gray on *Life Contingencies*, Milne, Jones and Bailly on *Annuities* shall not be taken from the Library. That the periodicals etc. be bound as usual.

Thus, the idea of a 'Reference Section' of the Library came into being.

The Committee charged with the oversight of the Library appears now to have been operating on the basis of regular maintenance in the way of binding 'the usual periodicals', but it had still to come to the Council for permission to buy books.

There is evidence of a considerable loss of books, etc. from the Library. In a bound copy of the Index, published in 1883, to the first twenty volumes of the *Journal*, there appears, among much miscellaneous advertising matter, a printed alphabetical list (undated) extending to two pages (and possibly not complete, for it ends with 'T') of books, etc. missing from the Library. A tighter control was established soon afterwards: in October 1884, a borrower giving reasons for the absence of a volume, the property of the Institute, was asked 'for its immediate return'.

In February 1885, the 'London Life Association' presented several volumes of original calculations by Barrett. A copy of Baily's *Doctrine of Life Annuities*, once belonging to General Hannington, was bought soon afterwards, possibly for its association-value: an actual manuscript of the work is in the Library. Some manuscripts of Peter Gray were given in May 1888 'to be retained or destroyed as the Institute in its discretion might decide'.

George King moved, in October 1885, that an Hon. Librarian be appointed. The question was referred to the Library Committee, but the idea was not carried into effect until 1888, when (perhaps because of doubt whether the Charter authorized such an Office) it was decided to have a third Hon. Secretary, who should work as Hon. Librarian. This curious plan was not adopted and the risk, if any, was taken of appointing, directly, two Librarians (see p. 283). 'Wooden blocks of the Seal for the use of the Library' were ordered to be made in 1886. Reporting in December of that year, the Library Committee recommended:

- (a) that donations to the Library and new works purchased be 're-printed' periodically in the *Journal*,
- (b) that on the fly sheet of each number of the *Journal* an invitation be addressed to the members to make suggestions for rendering the Library 'a complete and representative one',
- (c) that a Reference portion of the Library (Books not allowed to circulate) be extended by including works of which the Institute possesses only a single copy.

Duties of Hon. Librarians

A proposal for the opening of a Library Fund was made in 1887 but 'withdrawn for the present'. Meanwhile, the Library Committee had been considering the general state of the Library and, in December, secured the Council's approval of an increase in shelf-space, of a weeding-out of surplus and unsuitable books and pamphlets, and of the preparation of a new Catalogue, for which professional assistance was needed. It was decided also that notices be posted in the Hall and Offices inviting suggestions from members for making the Library 'complete'. Contributions were sought also, but without much immediate success, as a long report from the Library Committee showed in December 1888. The report was concerned with the desirability of having two Hon. Librarians 'with equal duties and authority': it was felt that, so, 'the need for sub-Committees, which have during the last two years been so freely resorted to, will cease, though on this point the Council will, perhaps, prefer not to interfere with the discretion of the full Committee'. The following statement was made of the duties of the Hon. Librarian or Librarians:

The general duties would consist of advising and taking the directions of the Library Committee as to the extension or curtailment of the Library in regard to any particular class of work; cataloguing and placing the books on the shelves; completing from time to time the series of periodical publications; seeing to all necessary binding and repairs; and generally keeping the Library in a complete and effective state. To these general duties will hereafter have to be added the special work of preparing a new printed catalogue.

It was suggested also:

(1) That the Hon. Librarians should have power to give instructions to the paid Officers of the Institute with regard to all such matters as might be arranged from time to time with the Hon. Secretaries.

(2) That acknowledgments of gifts of books should be made on receipt and should not be deferred until the meeting of the Council, which should be content with information that a list of additions was on the Table.

(3) That the Committee be given authority 'to stop the influx of books which still come to the Library only to be immediately thrown out as not suitable for retention'.

(4) That the Council consider whether it would not be desirable to take more active measures for increasing the Library Fund.

The Council would not agree to the third suggestion. As regards the fourth, it wished the Committee to say how it would propose to obtain more money, what annual sum (if any) should be appropriated from the General Fund for maintaining the Library and to what special objects the Library Fund should be applied.

Before answering these questions, the Committee proposed that an appeal for more money should be made. The President had told the Annual General Meeting of June 1888 that a sum of £168. 11s. had been raised, 'mainly from a personal appeal to members of the Council', adding that this was 'a commencement of what we hope will be a large subscription not only for the benefit of the Library, but in order to enable us to do something more for the members in the way of making this Hall into a Reading Room and possibly of appointing a paid Librarian'. When the Committee reported in February 1889, the Fund had risen to £224. 9s., which was described as 'so considerable that the realization of these objects seems now within reach, if the members really wish it'. The careful provision was added that, if sufficient money were not obtained 'for the purpose named', the sum subscribed would 'still be at the disposal of the Council for the use of the Library'.

By June 1889, the Library Committee had to express its disappointment that the total of the Fund was only £300. 7s.: it advised that the money be held intact for a year, in the hope that the members, as a body, might come to realize the desirability of a small but permanent endowment and that, so, the Fund might have risen to £500, 'the minimum which your Committee consider necessary for the purpose'. It was felt that a grant of £30 from the General Fund should suffice for the need of the ensuing year.

The Library Fund was used, over a term of years, for the general purposes of the Library.

Damp and dust were reported, in May 1890, to be having ill effects on the books, but the Committee, though clearly anxious, felt that 'this is only a part of the larger question of heating and ventilating the Hall'.

The Hon. Librarians made a full report at the same time on their activities, drawing attention to the growth of the collection, through gifts and purchases, and to the considerable amount of binding, the arrears of earlier times, that had been accomplished. The need for

a new catalogue was emphasized, when 'the deficiencies which still exist' should have been remedied and 'the steadiness with which additions are still taking place' should, presumably, have dwindled.

The new catalogue was put in hand in 1892 and published in January 1895, a copy being sent to each member of the Institute.

Manuscript Tables of two- and three-life Annuities, computed by John Finlaison, were given to the Library in 1896 by A. J. Finlaison. They were examined and those 'which the Hon. Librarians considered to be of interest' were bound. It was now that additional bookshelves were to be fitted 'on the dais at the East end of the Hall'.

A gift of special interest was made in June 1897 by C. D. Higham, who presented a set of the *Journal* owned by his late father, J. A. Higham. It was decided that the set should not go out of the Library.

More trouble occurred, in June 1897, over the failure of a borrower to return books to the Library. 'It was resolved that the Assistant Secretary should report arrears of books outstanding to the Hon. Librarians once a quarter and that the Hon. Librarians be authorized to write such letters as they might think fit.'

Two manuscript Tables, calculated by William Morgan, F.R.S., were given by Mr Richard Price-Williams and accepted with great pleasure in January 1898.

Despite previous representations, the protection of the books in the Library was not secured until 1899, when the Committee spent rather more than £300 in the fixing of backs and glass doors to the existing cases and in the provision of more shelves. But damp was reported again in 1913.

In November 1899, an impression of the Seal was authorized to be made for the use of the engraver of a book-plate. Great interest was shown in the motto to be used. Seventy-eight suggestions were submitted to the Committee, 'not only from the United Kingdom, but also from the Colonies and the United States'. 'Having regard to the importance attaching to the question from the point of view that, whatever words are chosen, no change can hereafter be made', the Committee 'have taken considerable time before arriving at a final decision. They would unanimously recommend to the Council the adoption of the motto "Certum ex incertis"'. The design proposed was submitted at the same time. In June 1901, the Council accepted a report from the Library Committee which had agreed

'to adopt a design of a seated figure', recommended by Mr Ernest Gardner, Professor of Archaeology at University College. The book-plates were inserted, and the books dusted and cleaned, at a cost of £15. 2s. A photograph of the Bookplate is reproduced here.

The Rules for the Regulation of the Library were revised and promulgated at the end of the year 1899.

A Card Index of the contents of the Library was ordered, in June 1901, to be prepared. Because such an Index is available, the most recent Catalogue of the Library is limited, generally, to a single alphabetical index of authors.

The Hon. Librarians were instructed, in December 1901, 'to keep a scrap-book for newspaper cuttings and to subscribe to some Press-cutting Agency'. An apparently somewhat similar suggestion, as regards a scrap-book, had been made, but not adopted, in 1887.

The Library Committee reported in 1906 that it had received from the Assistant Secretary 'a list of about 40 missing volumes and tracts, some of which had been destroyed by leakage'. Nineteen of them were known, in 1894, to have been lost. An encouraging account was given of the progress of the new Catalogue, which was issued in 1907.

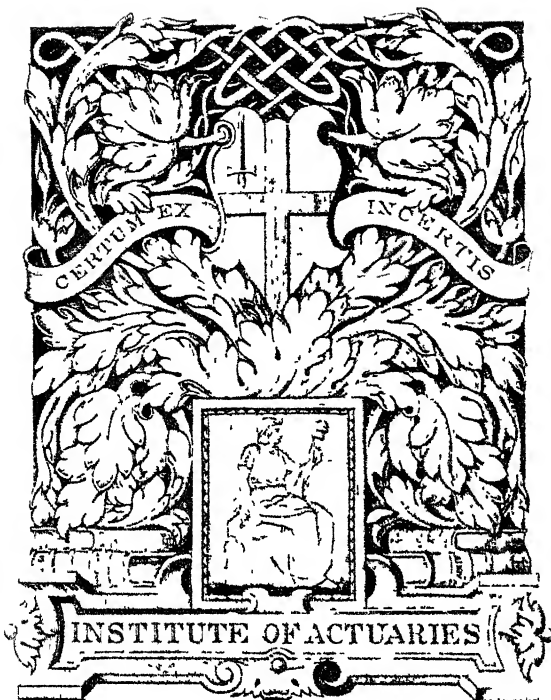
The question of preserving early Prospectuses of Assurance Offices was taken up by the Committee and, in 1908, a large number of copies, relating to various Offices, 'prior to 1839', was stated to have been given, in a volume, by the 'Clerical, Medical and General' Society.

A book of Annuity Tables, presented by T. G. Ackland, in 1908, on behalf of the Board of Trade, was given on the rather strange and surely unnecessary condition 'that the Board might have access to the volume at any time'.

In 1910, the Institute was able to acquire, at a cost of £15. 15s., a book of outstanding interest in the shape of a manuscript volume by F. Hendriks 'having reference to his researches into the History of Life Contingencies and his discovery of De Witt's Treatise on Annuities'.

The Council refused, in December 1910, to purchase the *Encyclopaedia Britannica*.

In the later years of the War of 1914-18, the adequacy of the Library was considered again, particularly with regard to works on Economics, Medico-Statistics and Law. Reports were made by



THE BOOK-PLATE

Dispersal of the Library in the 1939-45 War

members of the Institute specially qualified to advise on these subjects and the suggestions made were largely adopted.

The Council decided in May 1919 that the bookcases be removed from the Hall.

The Library Committee was asked in 1933 to consider the safety of special volumes and to arrange for the preparation of a new Catalogue. The opportunity was taken to eliminate some useless books.

In 1935, some gifts were announced of which the special interest was that they replaced important missing volumes.

A scheme for rehousing the Library as a whole was brought up in 1937, but reserved for future consideration.

The War of 1939-45 brought a serious threat to the Library, as to other things; the more important books were dispersed to the safe custody of a number of Assurance Offices in their strong-rooms.

Such facilities as the diminished Library could afford were made available to any members of the Dominion, American or Continental Actuarial Societies who might be in Great Britain on service.

In 1944, a fresh survey of the Library was ordered to be conducted.

After the Institute had begun to occupy its new, and temporary, Offices in Staple Inn Buildings, in 1945, the Library was placed on the third floor, and revision of the Catalogue was considered. Some members volunteered to examine and to catalogue the books in particular sections of the Library.

The importance is obvious of having a Library well stocked for the use not only of Students preparing for the Examinations but also of members generally. The record shows that, though this importance has been realized throughout the history of the Institute, the degree of practical recognition has been by no means constant. Recent events suggest that the matter is not likely to be overlooked now.

MORTALITY AND OTHER INVESTIGATIONS

Although this book is not the place in which the history should be recorded of the various important investigations with which the Institute has been concerned, some references must be made, especially with regard to the part played by the Council as the administrator of Institute affairs.

Early in 1849, a Scottish member wrote in advocacy of some plan 'for collecting correct returns from year to year of the mortality among insured lives' (perhaps, there was a hint of a continuous investigation, not adopted till many years had passed). He sent, later, a 'Resolution of Managers of Scotch Life Offices'. It was 'agreed to consider the recommendation on a future day'. In November 1850, the Council decided (as was mentioned in Chapter III) that, as an experience 'taken some years hence will be so much more valuable than if obtained at the present time, it does not seem expedient to make the proposed investigation now'. Instead, the Council turned its attention to the 'so much more urgent' matter of the mortality of 'persons residing in places abroad, or who have at any time incurred foreign risk'. Forms for this purpose were drawn up and issued to all the Offices, but only fifty-two responded. Details were obtained of 6,154 cases and Charles Jellicoe, in 1857, contributed a short account (*J.I.A.* VII, 131). The following extract shows the obvious general difficulty that was met in trying to extract anything useful from the material:

If, on the one hand, the conditions of the risk were kept within limits sufficiently restricted, the numbers in each class were all but insignificant; and if, on the other, attempts were made to remedy this last inconvenience, the groups comprised risks which were altogether heterogeneous.

A handsome tribute was paid, in a footnote, to Edward Cheshire, described as 'the then Secretary of the Institute', for superintending the work, which 'was executed with all the care and minute accuracy which, it is so well known, that gentleman brought to bear upon such undertakings'.

The Council, in these early days, was also interested in, and was consulted specifically about, the question of the proper rates of contribution for Benefit Societies.

In January 1862, the HM , first of the really important investigations, was launched. It was resolved:

That it is very desirable to collect and combine, as far as possible, the experience of the Life Assurance Companies of the United Kingdom, to the present time.

That a Committee be appointed to report on the best means of collecting such experience, with power to communicate with any other Committee, or Actuaries and Managers of Companies, who may be disposed to assist in obtaining the required information.

The Committee reported, in May 1862, giving draft circular letters and a schedule showing the data that the Offices were to be requested to provide. The recommendations were approved, with slight amendments, and the circulars and schedule were ordered to be 'printed and issued to the Life Assurance Companies'. In January 1863, the Honorary Secretaries were requested 'to take immediate steps for carrying out the resolutions' adopted in the previous May. The reasons are not apparent, either of the delay that had occurred, or of the rather urgent tone of the instructions. It may be, however, that the Council feared competition from the Actuaries' Club, in the shape of independent publication of material that it had collected. The Minutes of the Club state that, in January 1860, considerable progress had been made in 'extracting the mortality experience of the Offices of the Club' and that, in February 1862, Samuel Brown had sent the following letter to a member of the Club:

It has been decided by the Council of the Institute of Actuaries to endeavour to collect and combine the experience of the Life Assurance Companies of Gt. Britain to the present time. With this view a Committee has been appointed empowered to communicate with any other Committee or individual willing to aid in this useful object. Understanding that the Actuaries' Club have already collected the experience of some important Companies, and that you are a member of their Committee, I have been requested by our Committee to ask the favor of being furnished with the forms you have adopted, the names of the Companies and such other information as to the total number and nature of the facts collected as you can give us. The object will be to save the trouble of applying to Companies which have already completed the work and to collect the fresh experience, as far as possible, in such a form as will allow both collections of facts being compared or combined with each other hereafter. We shall feel obliged if you will have the goodness to bring this question before your Committee and let us know the result.

The reply of the Club, on 4 March 1862, was in these terms:

Mr Hendriks has brought under the notice of the Actuaries' Club the letter you were good enough to address to him relative to the proposed

collection of the Mortality Experience of Assurance Offices, and I am desired to express the best thanks of the Club for the communication.

The one fact of great interest to all those who seek for information bearing on the subject of vital statistics vizt.: the rate of mortality experienced by the Offices, is of course kept in view by each of the contributing Companies, but the method pursued to attain that end has not in its details been so uniform as to permit the Club to comply with all your requests, otherwise they would most cheerfully do so; and some Offices have pursued enquiries collateral to the main one.

All the Offices have, it is assumed, adopted methods that permit of the results being combined so as to arrive at an accurate result of the whole mass of experience and several of them have taken out their facts on the only form that I possess and this, in the shape of the enclosed card and instructions relating thereto, the Actuaries' Club have great pleasure in furnishing to you.

Our work is in such a state of forwardness that it is hoped the practical deductions from it may appear at an early date and I beg to assure you that, quite appreciating the labors made by others in a like direction with ourselves, we shall have great satisfaction in seeing it combined with the results of your investigation whenever the two shall be in a proper state for being brought together, although the Club prefer in the first instance completing as a separate work that which they have so long had in hand.

On 5 April 1862, the Club 'resolved to collect without delay, from members so far prepared, the numbers living and dying at each age, distinguishing males from females and British from Irish, and that a form of card should be at once got ready for that purpose'.

But the Club itself was in no continuing state of hurry, for, in April 1865, 'some conversation ensued as to what progress had been made in the collection of the mortality experience which was commenced about 7 years ago'.

To return to the activity of the Institute—contact was established with the Faculty of Actuaries, the Committee of which intimated, in February 1864, that cards had been adopted 'similar to those proposed for use in England'.

By the end of 1866, the investigation was well in hand. Mr Hopkinson was engaged by the Experience Committee 'to arrange the cards', at a salary of £2 a week, and was awarded 20 guineas 'for work already done'. Substantial sums, amounting to £1,142. 5s., were collected from the Offices for defrayal of expenses. An interim account,

The O^M and O^a Investigation Begins

presented in 1868, showed that computing had cost £432. os. 8d.; carpenters' work, £19. 10s. and carriage of parcels, £2. 7s. 6d.

The volume of Tables, prepared under the supervision of Peter Gray, was ordered, in April 1872, to be issued at a price of 10s. 6d. 'to members at the rooms' and of £1. 1s. 'to the general public at the publisher's'.

The investigation attracted foreign interest—in April 1868, Herr Lazarus of Hamburg asked for and was given copies of the forms, etc. used by the Institute for the Experience.

The H^M and its associated Tables provided for Life Assurance a standard and an equipment that remained in general use for more than 30 years.

After these heavy labours, a considerable period elapsed before anything further was done. In October 1892, a well-known doctor suggested a collective mortality experience of lives with consumptive family history, but the Council 'was not at present prepared to take up the matter'.

But, in December 1892, the second great task was contemplated—the O^M Investigation of Assured Lives and the O^a Experience of Annuitants. At the Council Meeting of that month:

The President gave notice that he would place it on the Agenda for the next Council meeting to consider the question of a new Collective Mortality Experience of Assured Lives and Annuity Nominees, and the appointment of a Committee to consider the question and report.

In January 1893, it was resolved unanimously:

That a preliminary Committee be appointed to consider the desirability or otherwise of collecting and combining the mortality experience of assured lives and annuity nominees of the Life Assurance Companies of the United Kingdom.

The Report of the Preliminary Committee being favourable, a Committee was chosen in February 1893 'to report on the best means of collecting such experience, with powers to communicate with any other Committee of Actuaries or Managers of Companies who may be disposed to assist in obtaining the required information'. The co-operation of the Faculty of Actuaries was sought immediately and secured: a Joint Committee of the Faculty of Actuaries and of the 'Scottish Managers' Association' was formed to keep contact with the Committee of the Institute.

The scope of the investigation was fixed soon afterwards, on the basis that an effort be made to embrace the whole of the data for the 30 years 1863-92 both inclusive.

A draft joint preliminary circular was approved in November 1893 for issue by the Institute and the Faculty of Actuaries. A satisfactory response came from the Offices and the plans were pressed forward: the Mortality Committee was able, in March 1894, to report at length regarding the form of card and the general requirements. It was arranged that the Scottish Committee should supervise the printing of cards (identical with those to be issued in England) for the Scottish Offices.

The very large mass of data to be prepared, and the detailed instructions to be followed, involved not only considerable delay before the cards could be ready for the technical work of the investigation, but also numerous queries. In March 1895, it was proposed to issue a circular dealing with the points so raised.

Some reorganization of control appears to have been made in June 1895, for 'it was decided not to reappoint the late Mortality Committee'. Instead, an 'Organizing Committee' was chosen 'to report direct to the Council'.

In January 1896, it was noted that only nineteen Offices out of forty-seven concerned had sent in their Life Assurance cards and that, of five Offices that had been asked and had agreed to furnish only Annuity cards, four had done so: information was to be sought about the position in Scotland. A month later, Scotland having reported 'favourably as to progress' there, further steps were taken, particularly to accelerate the arrival of the Annuity cards. As if enough work were not already in hand, a proposal was made, at a meeting of the Life Offices' Association, that the mortality should be investigated of Life Tenants in reversionary transactions. 'It was agreed to defer consideration of the matter until progress with the Life Assurance and Annuity Cards had been more clearly ascertained.'

Meanwhile, a loud but belated echo of the H^M Experience was heard; in May 1896, the details were settled of the forthcoming volume of Sprague's Select Life Tables for which he had placed material at the disposal of the Institute.

In October 1896, an advance of £250 was ordered to be made, on account of the new investigation, the sum to be drawn in two

amounts of £150 and £100, 'the cheque for the latter amount to be dated 14 days hence'. At the same meeting, the Committee recommended that 'official letters of reminder be sent in respect of the whole of the Scottish experience, and the two English and one Irish Offices whose cards have not yet been sent in'.

The position of affairs had to be considered again a few months later, when it was resolved that a Joint Conference in London be arranged at once, 'between delegates of the Institute Committee and an equal number of delegates from the Faculty Committee, in order to discuss and arrange a method of procedure'. A Permanent Committee, with wide powers, was formed soon afterwards.

Shelves were 'to be erected round the Classroom, according to a design submitted, for the purpose of accommodating the boxes containing the Mortality Experience Cards, at a cost not exceeding £35'.

Large sums were received from the Offices: over £5,000 were in hand in December 1897. The Council felt that the Institute should receive at least housekeeping expenses—in March 1898, the Joint Mortality Committee was ordered to be informed 'that the Finance Committee have ascertained that the charge to be made against the former Committee, up to date, for housekeeping expenses (without, of course, any cost for the use of the rooms) is £41; and that a reasonable charge to be made for the same purpose in future would be £60 p.a.'

And then, there is a long silent interval in the Minutes, during which, of course, the Joint Committee and its helpers were busily at work. In December 1900, George King was granted permission to publish in the *Journal* 'certain Tables deduced from the Assurance Experience recently issued by the Joint Committee'. In view of this consent, it is rather strange to find that, a year later, a member, asking to be allowed to use the new Tables in an Insurance Institute paper, was told that the Council 'had no power to grant the required permission'. The applicant was referred to the Joint Mortality Experience Committee.

In February 1905, the Committee 'had declared its functions to be concluded'. The terms of the Resolutions passed at the final meeting on 31 January 1905 were:

1. That the Committee now declare their functions to be at an end, and the undertaking committed to them, with the Assets and Liabilities as at 31st Dec. 1904, and the whole property under their control, including the

stereotyped plates and stock of bound and unbound sheets in the hands of Messrs C. & E. Layton, the Abstract of Data, and their Summary Cards, the Minute Books, Manuscripts, printed records and correspondence of this Committee, and of the Sectional Committees in London and Edinburgh to be, as from the said date, vested in and at the disposal of the Institute of Actuaries, and the Faculty of Actuaries in Scotland.

2. That a suitable Cabinet be ordered, at the discretion of the Honorary Secretary, and, at the suggestion of the Scottish Members, it was decided to recommend that, provided the Institute of Actuaries were willing to favour it with houseroom, the Cabinet containing the Cards be kept at Staple Inn Hall.

The Council agreed to accommodate in Staple Inn Hall 'the proposed Cabinet to contain the Abstract of Data and Summary Cards' and passed unanimously a cordial vote of thanks to the members of the London Section of the Committee.

Only a few matters remained to be settled. One was the division, between the Institute and the Faculty of Actuaries, of the proceeds of sales of books of Tables—it was agreed to share equally. Another was the preparation of a volume of Valuation Tables. It is interesting to note that some private members compiled further books—'Baker and Raisin' and 'Austin and Symmons' are cases in point, and a later example of individual initiative was provided by T. Bradshaw of Toronto.

Meanwhile, the Council had rejected a suggestion that the statistics of Widows' Funds be collected.

The O^M and O^a investigation was a very great, a wearing and a most lengthy task, in which, as the memorial volume *Principles and Methods* showed, the data were sieved 'to the gritted last' in a quest for the elimination of duplicates, for the removal of individual errors and for the testing of the comparative accuracy of various possible assumptions about ages and durations. T. G. Ackland and his associates did an almost incredible amount of work and a brilliant graduation was made by G. F. Hardy. But this last massive product (in its restricted sphere) of a spacious age was not to be repeated in other times. When occasion arose for further inquiry directed to similar ends, criticism prevailed of method, delay and general obsolescence of result.

At this point, it is permissible to place on record the fact, at least

indirectly germane to any history of the Institute, that, throughout the years reviewed, many members have contributed, for the general benefit, the results of investigations made individually or in concert.

The new age was to usher in approximation and continuity. Speculation is possible, but fruitless, on the question whether a different method, developed from the old procedure, might have found acceptance had the modern facilities been recognizably available whereby punched cards can be prepared most readily and rapid sorting and tabulation accomplished. In 1912, the Council was informed that the Council of the Faculty of Actuaries, stimulated at least partly by a paper read in Edinburgh by Mr L. P. Orr, had agreed 'that the establishment of a bureau for Research was desirable'. The Committee appointed to consider this proposal was sympathetic with the idea, but considered that too heavy a burden would be thrown on Offices if they were asked to provide data for a long period already passed. Moreover, it was felt that changes in conditions, meanwhile, made such data of little real value. It was suggested, therefore, that a continuous investigation should be set in train of the future mortality experience of the Offices, and that special aspects should be dealt with, such as the effects of climate, family history and personal record. Stress was laid also on the need for a new table of Annuitant Mortality, and the general view was expressed that there should be a permanent process conducted on simple and economical lines.

The matter must have been bruited abroad, to some extent, for, in May 1912, an offer was received from a non-member of his services in connexion with any Bureau that might be established.

An informal conference having been held between the 'Research' Committees of the Institute and the Faculty of Actuaries, the Council, in June 1912, accepted the ideas generally, subject to the framing of a simple scheme that should be welcomed and supported by the majority of the Offices. A long explanatory letter was issued to the English Offices early in 1913: the Scottish Offices had given conditional approval already. The following are extracts from the Institute's letter:

The operations of life offices have, hitherto, been based on mortality tables which have been the result of special investigations at long intervals.

These investigations have been very expensive, the work in connexion with them of a most prolonged description and the delays in getting out the final results have always been a source of regret to the actuarial profession. It is thought, too, that before long the life insurance companies will be calling for a fresh experience, as conditions of life have been changing so rapidly during the last generation that the results of the last investigation are already obsolete to some degree. This is certainly the case as regards life annuitants.

The executive staff would consist of a salaried actuary with clerical assistants.

As to the expense of the scheme to the contributing companies, it is impossible to give anything more than a very rough idea, but it is thought that if Offices generally support it, a contribution of £25 for every million of life assurance and annuity funds should prove amply sufficient.

The Faculty of Actuaries suggested, in June 1913, that the time had arrived for the appointment of a Joint Provisional Committee to consider details. Representatives of the Institute were named to confer with those of the Faculty.

A further letter was sent to the Offices at the end of June 1914, the basis of the investigation to be 'policies' and not 'lives'. An analysis of the replies came before the Council in October 1914, when the melancholy but inevitable decision was made 'that consideration of the matter be deferred until after the conclusion of the War'.

In November 1920, following a suggestion by G. J. Lidstone that a new Annuitant Experience should be taken out, a Committee was appointed. A year later, the Council was informed of progress and that the Faculty of Actuaries had agreed to co-operate, not only in the specific matter of the new experience, but also with regard to a continuous investigation. The completion of the work, as regards deduction of mortality rates, was announced early in 1923, and the Council agreed to proposals to limit the 'period of selection' to 1 year, to adopt 'the principle of extrapolation for obtaining a basis for new annuity-values' and to 'the basis of extrapolation suggested'.

A few months later, the Council expressed its unanimous opinion that a fresh investigation into the mortality of assured lives should be made. A report was accepted, in May 1924, whereby a continuous

The Joint Mortality Committee

investigation would be set up, the work to be done 'on broad lines' without any 'refinements' and not to include for the present any examination of special risks.

The matter was put in train, but nothing further was reported until December 1930, when the Council was informed

That arrangements were being made to print the data for the first three years 1924, 1925 and 1926...also...that work on the data for 1927, 1928 and 1929 was in hand.

Soon afterwards, the Faculty of Actuaries proposed that steps should be taken to provide a basis for research into the selection of lives. The question was referred to the Mortality Investigation Committee, of which the constitution was cast into its present form, whereby the Councils of the Institute and the Faculty have placed the ordinary mortality investigation and any special investigation in the hands of a small Joint Committee of the two Bodies, which is empowered to act 'without interim discussions with the Councils of both Bodies or any large Committee'. The President of each Body is a member of the Joint Committee, which is expected to report to its principals from time to time.

Although the instructions to the Offices had been framed on simple lines, the Presidents of the Institute and the Faculty of Actuaries had the very unpleasant duty of stating, at the respective Annual General Meetings in 1934, that certain errors in the returns had been discovered which, though not seriously affecting the monetary functions, were described as indefensible.

A separate investigation of the mortality under Temporary Assurances was carried out by an individual member of the Faculty of Actuaries.

Other possible work was mooted, but the War of 1939-45 broke out, and all that could be done was to maintain, as far as possible, the progress of the continuous general investigations already in being. Apart from elaborate volumes of Tables based on the data for the years 1924-9, various other results have been and are being issued.

During the war, arrangements were made to collect statistics of 'War Deaths', but, for 'security' reasons, no general release of the results was permissible.

In 1944, a request was received for inquiry into the mortality experienced under policies for large amounts. The matter had to be deferred until a more convenient season.

For many years, the main burden of the work has rested on the Chairman of the Joint Committee, Sir William Elderton, who was assisted, specially and untiringly, in London, by H. J. P. Oakley. None but these two distinguished actuaries could attempt to measure their enormous labours. A small staff of computers was obtained—it is not possible to say ‘gathered’—for they worked in all sorts of places, until, in 1945, accommodation was found for them in No. 2, Staple Inn.

SOCIAL INFLUENCES

The plain purpose of the few remarks that are offered under this sub-title is to set on record the fact that the interior life of the Institute, and also its influence upon outside affairs, have been stimulated, disciplined and enriched by the social contacts that many members have enjoyed because they were members. There have been several media of this fellowship; the senior in every respect is the Actuaries’ Club, which at first, as numerous references in this book have shown, was a strictly limited professional association, implacably opposed to the Institute. The members of the Club met regularly to discuss business matters, but they dined together at intervals. The grant of the Royal Charter to the Institute, in 1884, removed the old antagonism and, thenceforward, the Club became, what still it is, a Dining Club of the more senior members. It absorbed, in 1899, the Institute of Actuaries’ Club, which had been founded in 1855. Dinners are held after the meetings of the Council of the Institute.

In 1903, a small group of relatively young, but already distinguished, actuaries began to dine together after Ordinary Meetings of the Institute. They gave to themselves the name of ‘The Gallio Club’ (*J.I.A.* LVII, 342). For a time, the number was allowed to increase very slowly, but the Club rose to a position of much influence. It has now a very considerable membership and is recognized as holding the privilege of receiving, as guests, any distinguished visitors who attend General Meetings of the Institute. Its operations have been coloured by sporadic outbreaks of ‘poetry’, sometimes contributed

In Lighter Vein

by members and occasionally by guests. The following two trifles are offered as a selection:

Verses inspired by a remark of H. W. Manly (a Past-President of the Institute) that the reason for his not being in the least bald was considered by his family to be that he had a habit of rubbing his head with his pipe when thinking out a subject:

Does your hair begin to fall
Like to autumn leaves when ripe?
Maiden heed it not at all
Rub your head with father's pipe

Use no lotion which they sell
Those enchanting locks to wipe
This will answer just as well
Rub your head with father's pipe

So my dear you take the bun
Of all tresses, yours the type
'Hair Restorers' quite outdone
Thanks alone to father's pipe.

Verses contributed by a guest, well-known in his day for neat rhyming, about the operation of the bonus system of the 'Clerical, Medical and General' Life Office:

76 pro 27

I had a little client who was bold enough to dare
To go to be examined at 15 St James's Square.
He was only 27, was this unsuspecting cuss
And was sailing to the Congo which is not salubrious

The Medical Directors were of course extremely kind
When he mentioned that he didn't wish his case to be declined
And when they went away they said how glad they were he'd come
And withdrew into the Board Room to assess the premium

My client sailed away that day upon some ship or other
And left me to communicate with his old widowed mother
And when the Board's acceptance came all blotched with feeling tears
I saw they'd rated up that life just nine and forty years

They sent some Bonus figures down, all very fine and large
Explaining how they'd nullify and wipe out that surcharge
And pointing out that if he lived he'd get a bonus which
Would make him, in extreme old age, most fabulously rich

I wrote to tell the Widow and in well-considered fun
I drew a mental picture of her son at 81
The oldest centenarian (at office age) on earth
And I dwelt upon those bonuses for all that they were worth

She telegraphed, she telephoned, she tore her widow's weeds
She terrified my office boy by coming down to Leeds
And when that well-trained youth averred that I had gone abroad
She boxed his ears and told him she would go to see the Board.

The same author, in verses published by a leading Insurance paper, achieved the almost incredible effect of producing a passable rhyme on the august name of G. J. Lidstone.

The Gallio Club received, in 1920, a number of young actuaries who, formerly, had met 'in a Tavern off Fleet Street'. These men included the survivors of a small group of original members of the Students' Society—a band untimely broken by accident, overwork, disease and the ravages of war.

The value of these various associations has lain not only in the increase of mutual understanding among contemporaries who compete actively in their respective Offices, but also in the informal meeting of younger men with their older fellows. Moreover, the entertainment of distinguished guests from the outside world has made for a better appreciation of the scope of the profession and of the quality of the service that it offers. Because of all these matters and of what they imply, it has been thought right to mention the Dining Clubs in a history of the Institute. But some good things imply corresponding disadvantage; in the present instance, the defect is the impossibility of extending the facilities to all the members of the Institute, without making the various Clubs so large that their intimate atmosphere is dissipated. In an attempt to remedy this trouble, the Fellowship Club was founded years ago and has flourished and developed its own tradition. Any difficulties that might have arisen acutely between two Clubs of the same profession, meeting on the same nights, have been avoided by mutual good sense, though problems such as transfer from one Club to another, duplicate membership and, above all, the practical necessity of limiting numbers, have not been really met and solved.

An Aureole of Actuaries

Actuaries associated particularly with Industrial Assurance and kindred work have a meeting-place of their own in the Denarius Club—for some this is really a supplemental benefit, since they are members also of the general Clubs already cited.

Many years ago, John Ruskin pleaded that, Great Britain being but a small island, its people should be concerned to make it an island of friends. It is claimed, as simple fact and source of proper but humble pride, that, in some sensible degree at least, the company of members of the Institute of Actuaries has been a society of friends. More recently, a distinguished statistician suggested, doubtless in fun, that a suitable general term to describe a flock of his kind would be 'a bicker'. If that be true which has been said in this book about their professional spirit of service and friendship, it might be fitting to speak of the members of the Institute as 'an aureole of actuaries'.

STATISTICS

There was, not far from Staple Inn, a famous preacher noted for the hard vigour of his utterance. In announcing the taking of the offertory, for example, he would say: 'The collection, for those who care for such things.' In some similar spirit of nonchalant necessity, statistics are mentioned here, but no figures are given.

POSTSCRIPT

It was said at the beginning of this book that the record had to be selective. Now, at the end, it may be that the account is what students of an earlier day knew as a truncated aggregate experience—a heaped mass of data from which all effect of selection has disappeared, by very rough elimination.

Surely, it is right that the last words of a book like this should try to sum up not only the author's feeling about the subject, but also his belief about the source of the Institute's achievement and of the promise of still ampler development. So, the story shall end with two confessions of faith and a final word of the future. One of the greatest whom the Institute has had the honour of numbering among her sons said: 'First and last, I was an Institute man.' The second message went from W. E. Gladstone on his death-bed to the University of Oxford, in response to a resolution of sympathy from the Hebdomadal Council: 'I served her, perhaps mistakenly, but to the best of my ability. My most earnest prayers are hers to the uttermost and to the last.'

And of the unknown, as the members of the Institute admit themselves debtors to the past that they may be finer servants of the future? Simply what Rudyard Kipling said in one of his stories: 'The hour of earliest dawn is fortunate and the wind that runs before it has ever been my most comfortable counsellor. "Wait!", it said, all among the night's expectant rosebuds, "To-morrow is also a day".'

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NOTES

1. No individual references are made to members whose names are on the Memorial of the War of 1914-19, or are to be recorded on that of the War of 1939-45. They are left together in their own companies.

2. Except as regards the 'Landlord and Tenant' relationship between the 'Prudential' and the Institute, the Assurance Offices mentioned are listed (whatever the reference) in alphabetical order, under that main heading.

3. Educational Work (and relative matters) are indexed under this main heading with various sub-headings. The individual subjects included in the Examination Syllabus, the names of text-books and the titles of lectures are not given. A similar procedure has been followed with respect to Mortality and Other Investigations, the *Journal* and the Library. Individual books, etc. mentioned as gifts to, or as being in, the Library are not indexed, nor are the authors of 'general' works.

4. The symbol '+' is used to indicate that the item indexed appears also on the page, or several pages, immediately after that which the sign follows. The symbol is shorter than 'et seq.' and, perhaps, is appropriate in a work relating to actuaries.

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